FINAL SUPPLEMENT TO THE

ENVIRONMENTAL IMPACT REPORT

RESPONSES TO COMMENTS

MINOR SUBDVISION (MS504-87)

SCH NO. 2008022136

August 2008

Prepared By

City of Lafayette

LAFAYETTE

SETTLED 1848 — INCORPORATED 1968

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CHAPTER 9

RESPONSES TO COMMENTS

CHAPTER 9 – RESPONSES TO COMMENTS

9.1 INTRODUCTION

The Draft Supplement to an Environmental Impact Report for MS504-87 (Draft SEIR) was circulated for a 30-day public review period beginning June 11, 2008, and ending July 14, 2008, as assigned by the State of California Governor's Office of Planning and Research State Clearinghouse and consistent with the State *CEQA Guidelines.* Copies of the document were distributed to state, regional and local agencies, as well as organizations and individuals, for their review and comment.

Section 15088(a) of the State *CEQA Guidelines* states that:

> "The lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft SEIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extension and may respond to late comments."

In accordance with Section 15088(a) of the State *CEQA Guidelines,* the City of Lafayette Planning Services Division, as the lead agency, has evaluated the comments received on the Draft SEIR and has prepared written responses to the comments received.

All comments on the Draft SEIR, and the responses thereto, are presented in this document. Section 9.4 provides a list of all those who submitted comments on the Draft SEIR during the public review period. Section 9.5 contains Master Responses to public comments referring to the same common topic area. Section 9.6 contains all of the comments received on the Draft SEIR along with responses to each. Text changes resulting from comments on the Draft SEIR and staff-initiated text changes are presented in Chapter 10 (Revisions to the Draft SEIR). Revisions to the Draft SEIR text are indicated by double underline text (<u>underline</u>) for text additions and double strike out (~~strike out~~) for deleted text.

9.2 CONTENTS OF FINAL SEIR

The Final SEIR is composed of the following elements:

- The Draft EIR or a revision of the Draft;
- A list of persons, organizations and public agencies that commented on the Draft EIR;
- Copies of all comments received; and
- Written responses to environmental points raised in those comments.

9.3 CERTIFICATION OF FINAL SEIR AND APPROVAL PROCESS

Pursuant to Section 15090(a) of the State *CEQA Guidelines,* the Final SEIR must be certified before the lead agency can take action on the project. The Guidelines also state that a lead agency may provide an opportunity for review of the Final EIR by the public or by commenting agencies before approving the project. The review of the Final EIR should focus on the responses to comments on the Draft SEIR.

Following Final SEIR certification, but prior to the City of Lafayette taking action on the project, the lead agency will prepare a Mitigation Monitoring and Reporting Program (MMRP). Before approving (or conditionally approving) the project, written CEQA findings must be prepared for each significant impact identified for the project, accompanied by a brief explanation of the rationale for the finding, in accordance with Section 15091 of the State *CEQA Guidelines.* Certification of the Final SEIR and approval of the CEQA findings and Mitigation Monitoring and Reporting Program may be considered during one final public hearing. The certification of the Final SEIR must be the first in this sequence of approvals.

9.4 LIST OF COMMENTERS

All commenters on the Draft SEIR are listed below. Each comment is identified with a two part numbering system. The first number corresponds to the number assigned to the comment letter. The second number corresponds to the order of the comment within the letter identified. For example, the assignment 2-1 refers to the first comment in comment letter #2 from Archer – Norris. Some of the comments submitted to the City also addressed other matters related to the project involving planning and zoning law and other City procedures; however, the responses included in this document relate only to the Draft SEIR and CEQA issues.

Comment #1 Archer-Norris/Edward Shaffer, April 28, 2008

Comment #2 Archer-Norris/Edward Shaffer, May 9, 2008

Comment #3 Walter Price, June 17 and June 20, 2008

Comment #4 Walter Price, July 2, 2008

Comment #5 Adopted Minutes from the June 19, 2008 Planning Commission Hearing

Comment #6 Peter Clark, July 8, 2008

Comment #7 Archer-Norris/Edward Shaffer, July 14, 2008

9.5 MASTER RESPONSES TO COMMENTS

9.5.3 Geotechnical Considerations

9.5.3a Geotechnical Investigations and Analyses

City staff and the City's geotechnical consultant, Alan Kropp & Associates (AKA) evaluated the full scope of geotechnical reports, studies, comments, and correspondence prepared, conducted, or submitted between 1987 and March 2008. A complete analysis of the potential geological impacts, level of significance, and recommended mitigation measures are included in Section 3.2.3.

In May 2007, City staff met with Purcell, Rhoades, and Associates (PRA) and AKA to discuss geotechnical issues. At the meeting, it was determined that the field mapping of landslides as generally represented in Figure 2 of the PRA 2006 Update was acceptable regarding Parcels A and B. It was also determined by the City, that additional field investigation should be conducted to further evaluate subsurface conditions on Parcel C and the swale area covering the Parcel B/C boundary. The purpose of this investigation was to evaluate the potential for landslides within the broad swale of Parcel B and C and the potential of deep-seated bedrock landslides on Parcel C. It was agreed the additional field work would include eight exploratory test pits/trenches and the drilling of two rotary wash borings. PRA conducted the field work in July 2007.

The rotary wash borings consisted of two, 5-inch diameter core holes drilled to a depth of approximately 80 feet below the existing ground surface for a hole drilled just below the proposed roadway, and approximately 60 feet below the ground surface at the lower area of the site, near the Parcel B and C property lines. The test pits were excavated in order to further evaluate the subsurface conditions in the area of Parcel C.

AKA performed an initial site reconnaissance in June 2007. In July 2007, PRA examined the PRA cores from the two exploratory borings and conducted a site visit to examine the test pits. AKA confirmed the presence of a large landslide complex in the central portion of the site on Parcels B and C. The lower portion of the landslide occupies the broad swale north, and partially within, the Parcel C proposed building site. The test pits revealed that this swale contains a complex of landslide debris and colluvial deposits. In the vicinity of the existing dirt road, the landslide branches into two separate landslides, which occupy broad hillside swales above the road. The northern swale and landslide are entirely within the subject property. The southern landslide extends off site above the property to the west for a distance of approximately 250 feet. The two landslides coalesce in the lower portion of the property. Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features. See Chapter 10.

AKA concluded that the subsurface investigations conducted through 2007 and PRA reports and studies through 2008, adequately identify the extent of landslide features affecting the property and methods for their repair. See Appendix D.4 of the Draft SEIR for AKA's report. Between 1987 and 2007, over 20 points of penetration were used to identify the vertical and lateral extent of the landslide feature.

As stated on page 55 of the Draft SEIR, the City and AKA concluded that the total collection of project documents and the analysis contained in this section [3.2.3] provide an accurate and complete disclosure of potential geotechnical impacts expected from a three-lot subdivision at this stage of review. As noted in the FEIR, 2006 Update, and 2007 Supplemental Investigations, soil stability problems can be mitigated through conventional cut and fill (buttress) grading and appropriate foundation design. Once a tentative map is approved but prior to final map acceptance by the City, subdivision improvement plans will have to be reviewed and approved by the City Engineering Services Manager. The improvement plans will reflect site specific subsurface investigations and analyses. The purpose of these investigations and analyses is not to find new information but to confirm the results of the existing studies and will include recommendations and sufficient details to confirm and substantiate the final design and the findings of this SEIR.

If the findings of the site specific investigations indicate work that would change the nature of the project reviewed in the SEIR, the City would have to consider whether any of the circumstances in Public Resources Code section 21166 would require additional environmental review once the individual home sites and development plans are considered at the discretionary Design Review and Hillside Development stage. In that regard, the City considers the additional details and geotechnical studies requested in comments 2-6, 2-10, 4-1, 6-2, and 7-24 to be part of the design-level studies that will be included in the subdivision improvement plans. See mitigation measure 5 as clarified in Chapter 10. Requiring later studies is not improper deferral of impacts analysis or mitigation because later design must be consistent with the performance-based standards described in the SEIR.

9.5.3b Subdrains and Dewatering

Landslide mitigation measures will include subsurface drainage systems to control the subsurface water in the slide area. Subdrain locations are shown in Figure 6 of the Draft SEIR. The proposed repair system incorporates a series of subdrains beneath buttress fill which will be discharged at an appropriate location such as the creek channel that passes through the lower portion of Parcel C. The precise nature of the subdrain outlet systems will be determined at the design level stage of the project. The subdrain system could include but may not be limited to, subdrains which discharge by gravity in a non-erosive manner or subdrains which discharge by gravity to a sump with the water then pumped to a location and allowed to dissipate. Subdrain systems are commonly used in landslide repair and buttress fills and do not generate sufficient volumes of water to result in drainage problems.

In response to a question asked by a Planning Commissioner at the Planning Commission public hearing on June 19, 2008, Alan Kropp stated, "If he had to evaluate the risk to a downslope property from an existing landslide versus a repaired landslide that could cause settlement from dewatering, the unrepaired landslide is the bigger issue. He said dewatering is not an issue without merit but it can be addressed as part of the further study."

It is probable that the subdrain system will collect some of the subsurface water which would normally percolate to areas downslope resulting in the dewatering of soils. However, subdrains would not collect all of the water and water from other sources such as rainfall, irrigation, or water from upslope areas which are deeper than the subdrains would continue to flow and percolate downslope.

As provided in mitigation measure 12 (drainage), the applicant must submit a stormwater control plan based on a hydrology and hydraulic analysis and designed such that post-project peak run-off has been detained/retained onsite. Mitigation measure 12 has been revised to clarify that the stormwater control plan will include surface runoff that may be generated by the subdrain system. See Chapter 10 for clarification of mitigation measure 12.

9.5.4 Disagreement Among Experts

Some comment letters stated that the analysis and conclusions provided in the City's SEIR were inaccurate or otherwise questionable because conflicting information or conclusions were submitted to the City by the commenter or the commenter's consultant(s). These comments further allege that these conflicting opinions and conclusions make the City's SEIR inadequate under CEQA. This is incorrect.

State CEQA Guidelines section 15151 states that: "Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." These responses to comments, which are included as part of the Final SEIR, summarize any disagreements between the City's conclusions and those of the commenter and provide an explanation regarding the substantial evidence supporting the City's conclusions. Accordingly, the City's SEIR does comply with the requirements of CEQA.

9.6 RESPONSES TO INDIVIDUAL COMMENTS

Responses to individual comments begin on the next page starting with the comment letter followed by the response(s).

Comment #1

RECEIVED
APR 29 2008
CITY OF LAFAYETTE
PLANNING DEPT.

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April 28, 2008

VIA EMAIL AND REGULAR MAIL
Christine Sinnette, Senior Planner
City of Lafayette
3675 Mt. Diablo Boulevard, Suite 210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII
Notice of Preparation of Supplemental EIR

Dear Ms. Sinnette:

I represent the ten Lafayette residents listed at the end of this letter. My clients live next to and downhill from the Leamy property being proposed for subdivision. As you know, last year the City attempted to fast-track approval of the Leamy project relying only on an "addendum" to the old uncertified EIR. Among many objections, my clients were especially concerned about the geotechnical analysis, which overlooked the need to study and mitigate deep-seated landslide conditions.

Fortunately, we were able to convince the City to arrange for peer review by Alan Kropp & Associates. Mr. Kropp agreed with my client's technical consultant, and advised the City that additional study in fact was warranted and much more extensive repair work likely would be needed to make the site safe for new homes and roads and to protect the neighbors. As a result, the City stopped the approval process while Mr. Leamy reconsidered the situation.

The purpose of this letter is to protest the City's latest effort to process the Leamy application. Quite by accident, my clients found out that on February 25 you published a "Notice of Preparation of a Supplement to a Certified Environmental Impact Report" ("NOP"), which you apparently circulated to certain public agencies and select other parties. However, to our surprise my clients were never notified by the City, and I did not receive a copy.

Defective Noticing Procedure

Our first comment is to point out this significant defect in the City's procedure for distributing the NOP. As a result, you must recirculate the NOP and allow time for all interested parties to provide input on the needed scope for the new Supplemental EIR. While the City may have complied with Public Resources Code ("CEQA") section 21080.4 by sending the NOP to specified public agencies, it overlooked Section 21092.2 which requires also sending the NOP to

1-1

every person who has filed a written request for notices. Attached is my March 5, 2007 email to the City which stated in part: "Please also ensure that I receive all future notices ... related to this matter." The City should have sent me the NOP. Frankly, I am amazed and my clients are distressed that you did not send them copies, given their obvious deep concern and close involvement with the City's consideration of this project.

In addition, please confirm that you complied with CEQA Section 21092.3, which specifies that the NOP also must be posted with the County Clerk. Given the failure to send copies to me and my clients, I suspect this requirement also may have been overlooked. In any event, when the NOP is recirculated with a new comment period, it also should be properly posted at the County.

Failure to Recognize Geotechnical Critiques

The NOP is supposed to inform public agencies and interested parties as to probable environmental effects of the project (CEQA Guidelines section 15082(a)(1)(C)). We are quite concerned that the description of geotechnical studies and conclusions does not mention the April 26, 2007 peer review report by Alan Kropp & Associates. Mr. Kropp confirmed my clients' fears that landslides on the site likely are larger than Mr. Leamy admits to, and will require much more grading and repair work than he is willing to do.

Furthermore, the NOP makes no mention of the technical analyses and critiques submitted by Seidelman Associates. Paul Seidelman is a Registered Professional Civil Engineer, Registered Geologist, Certified Engineering Geologist and Geotechnical Engineer, as well as having a General Contractor's License in General Engineering. He has many years of experience and fully qualifies as an expert whose conclusions and opinions should be acknowledged by the City and given full weight in the EIR.

According to Mr. Seidelman, during the past year Mr. Leamy retained a new consultant, geologist Mitch Wolf with Cal Engineering and Geology, who has reviewed the technical data, toured the site with Mr. Seidelman, agreed with Mr. Seidelman's conclusions, and advised Mr. Leamy that additional borings and studies are needed to adequately characterize landslide conditions and identify proper mitigation measures. Mr. Leamy apparently has chosen to ignore this advice, and has not disclosed to the City the opinions of his new consultant.

Mr. Leamy and the City cannot pick and choose what technical information and analyses to disclose and use in the EIR process, or disregard conclusions that may be inconvenient. CEQA requires fully informing the public and decision makers of all relevant information about potential environmental impacts of the project. The City cannot use the absence of data – because Mr. Leamy refuses to perform deep borings and large diameter hole logging – to declare "no potential impact."

C0292001/651941-1

Last year, Paul Seidelman submitted detailed technical critiques of the geotechnical information being used by the City and Mr. Leamy. He separately provided Mr. Leamy with suggestions as to needed additional work, and offered to help arrange for the use of down-hole logging equipment that was scheduled to be in the area this month. Mr. Leamy has chosen to ignore this advice, trying to push through City approvals based on the original inadequate and inaccurate data, apparently in an attempt to save time and money.

Mr. Seidelman has identified a number of serious errors and omissions. These include:

1. Not providing a map showing continuation of onsite landslides onto adjacent property, or evaluating off-site effects of project construction on the neighbors. Landslides do not miraculously stop at property lines. 1-2

2. Failing to identify water table conditions and levels in landslide areas, or to evaluate changes to the water table likely to occur from project construction and resulting impacts on neighbors. 1-3

3. Relying on one limited boring to claim the extent and shape of a landslide has been adequately identified. 1-4

4. Using "critical values of cohesion" and a "friction angle" significantly different from what are commonly accepted as applicable to this type of situation. Mr. Leamy used long term cohesion values of 600-1200 pounds per square foot, much higher than the recognized standard of 0-100. The friction angle for Contra Costa group clay soils range from 12 to 16 degrees, not 18 degrees as cited by Mr. Leamy's report. These are critical differences that have not yet been explained or justified. 1-5

Mr. Seidelman also discussed these problems with James Joyce, a geologist working for Alan Kropp who reviewed the geotechnical investigations of Mr. Leamy's consultant. Mr. Joyce agreed that to fully evaluate subsurface conditions more than one boring is needed, and down-hole logging is more accurate – especially where bedrock movements may be involved in the landsliding. Mr. Joyce also apparently determined that the consultant's evaluation of the limited available soil cores was incomplete. These and other discrepancies and inadequacies must be resolved as part of the City's new CEQA process. 1-6

The 1988 EIR Was Never Certified

The City continues to mischaracterize the legal status of the 1988 EIR document. It was not "certified" because it was never used to support any approval, and therefore it cannot be relied on as a Final EIR. It is nothing more than a collection of studies performed 20 years ago, which had serious deficiencies then that have only grown worse over time. I provided an analysis of this situation in my March 5, 2007 letter to the City Council; to date I have not seen any rebuttal from the City, nor any information justifying the continued claim of having a 1-7

certified EIR. This misstatement misled public agencies receiving the NOP and must be corrected when the new NOP is recirculated.

Consider All Submissions

During the City's processing effort in 2007, I submitted four letters to the City Council describing defects in both the 1988 EIR materials and more recent reports that Mr. Leamy was relying on (dated March 5, April 13 (two letters) and April 23). Paul Seidelman also submitted a letter to the Council dated April 16, 2007, as well as earlier correspondence and testimony before the Planning Commission. All the information in these letters should be included in the new CEQA process, and all the critiques of the previous studies should be addressed. Otherwise, any approval by the City will have fatal legal defects. I trust those documents still are in the City files – let me know if you need a new copy of anything. 1-8

Future CEQA Processing

Under these circumstances, it may not be appropriate to describe the upcoming CEQA product as a "Supplemental EIR.", That term only applies when a new report is adding to a completed and certified EIR – which has not yet occurred. In that regard, please provide the name of the independent CEQA consultant hired by the City to prepare the new EIR. If the City is taking the unusual step of letting Mr. Leamy's consultants prepare a draft EIR, please indicate what consultants the City will retain to provide the necessary independent technical peer review. 1-9

Mr. Leamy apparently will be required to indemnify the City's legal costs of defending an approval in court, while the City will pay to defend itself if the subdivision is denied and he sues. The risk of exposure to legal costs cannot influence how the City studies and processes this application. The City has a duty to protect its residents and their property. My clients do not oppose Mr. Leamy building on his property – so long as the recognized geotechnical, drainage and other concerns are fully studied and the project is properly designed to avoid harm.

Request for Notices

This letter should serve to renew my 2007 request to receive all notices related to the City's CEQA processing of the Leamy project, pursuant to Public Resources Code section 21092.2. In addition, by this letter I request all notices required under the Government Code related to the Leamy project, pursuant to Government Code section 65092. Please let me know if the City charges a fee for such notices – although the fee schedules listed on the City website do not mention such a requirement. Please also tell me if the City requires annual renewal of this request for notice, as authorized by Section 21092.2 – though I found no related references on the City website. Finally, I request copies of all staff reports and studies prepared by or for the City or submitted to the City by others related to the Leamy project, by email if possible, or if not by email then by sending me email notification that such materials are available to be picked up at the City offices. To the extent possible, all notices and other materials should be sent by

email to assure the earliest possible receipt, addressed to **eshaffer@archernorris.com**. Prompt receipt of all notices and other materials is necessary to afford my clients sufficient time to respond, and avoid the need to postpone hearings or extend comment periods.

Thank you in advance for your attention to these requests, and your diligence in processing the Leamy project in full compliance with applicable CEQA and other law.

Sincerely,

ARCHER NORRIS

Edward L. Shaffer

ELS:ls
Enclosure: March 5, 2007 email by Edward Shaffer

cc: (via email only except as noted)
Mala Subramanian, City Attorney
Steven Falk, City Manager
Joanne Robbins, City Clerk (via regular mail also)
Ann Meredith, Community Development Director
Niroop Srivatsa, Planning & Building Manager

Peter and Susan Colby, 4109 Happy Valley Road
Peter and Martha Clark, 4103 Happy Valley Road
Walter and Virginia Price, 4115 Happy Valley Road
Steven and Rochelle Klein, 4107 Happy Valley Road
Tim Johansen and Mary Hartfield, 4111 Happy Valley Road

C0292001/651941-1

Response to Comment #1: Archer-Norris/Edward Shaffer, April 28, 2008

1-1 The commenter states that the City may have complied with Public Resources Code section 2108014 by sending the Notice of Preparation (NOP) to public agencies but the City overlooked sending the NOP to parties that had previously requested such notice. Although the NOP was sent to the State Clearinghouse, the City neglected to send the NOP to the commenter as he had previously requested. The NOP was subsequently sent to the commenter and the period to respond to the NOP was extended from March 27, 2008 to June 5, 2008. The NOP was filed with the Contra Costa County Clerk's office on March 4, 2008.

Regarding comments about the content of the NOP, the NOP process was properly followed by the City. The commenter incorrectly summarizes Section 15082(a)(1)(C) of the CEQA Guidelines which states the following.

"(a) Notice of Preparation. Immediately after deciding that an environmental impact report is required for a project, the lead agency shall send to the State Clearinghouse and each responsible and trustee agency a notice of preparation stating that an environmental impact report will be prepared. This notice shall also be sent to every federal agency involved in approving or funding the project.
(1) The notice of preparation shall provide the responsible agencies with sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response. At a minimum, the information shall include:
(A) Description of the project,
(B) Location of the project (either by street address and cross street, for a project in an urbanized area, or by attaching a specific map, preferably a copy of a U.S.O.S. 15' or 7-1/2' topographical map identified by quadrangle name), and
(C) Probable environmental effects of the project."

The NOP process provides notification to responsible and trustee agencies and information on the probable environmental effects of the project. Section 15082(a)(2) states that a copy of the initial study may be sent with the notice to supply the necessary information. Instead of the initial study prepared for the project, a detailed narrative was included in the NOP sent to the Clearinghouse which identified potential impacts related to land use and zoning, traffic and circulation, geotechnical considerations including two landslides and unstable and expansive soils, storm drainage and runoff, biologic and habitat considerations, visual impacts, and cultural resources was included in the NOP sent to the Clearinghouse. The NOP process is not meant to provide a complete analysis of potential impacts but to provide input into the scope of the EIR. The Draft SEIR presents a detailed analysis of the probable impacts mentioned above.

In preparing the Draft SEIR, the City considered all of the reports, studies, public comments, and correspondence submitted on the project through May 2008 including

but not limited to those of California Department of Fish and Game, East Bay Municipal Utility District, Contra Costa Fire Protection District, East Bay Municipal Utility District, Lafayette Planning Commission, Trails Subcommittee (Lafayette Parks, Trails, and Recreation Commission, City of Orinda, Alan Kropp (Alan Kropp & Associates), Dean Affeldt (Purcell, Rhoades & Associates, Inc.), Howard Martin, (Schell & Martin, Inc.), Mitch Wolfe (Cal Engineering and Geology), Paul Seidelman (Seidelman Associates), David Bowie, Edward Shaffer (Archer-Norris), Mary Hartfield, Tim Johansen, Steven and Rochelle Klein, Walter and Virginia Price, Peter and Susan Colby, and Peter and Martha Clark.

City staff and the City's geotechnical consultant, Alan Kropp & Associates (AKA) evaluated the full scope of geotechnical reports, studies, comments, and correspondence prepared, conducted, or submitted between 1987 and March 2008. A complete analysis of the potential geological impacts, level of significance, and recommended mitigation measures are included in Section 3.2.3. Also see Master Response 9.5.3a.

1-2 The remedial work will address geotechnical issues on the project site to facilitate development of the home sites described as part of the project. The City cannot legally require the project proponent to remediate conditions on land that the proponent does not control and that would not be affected by the project. Because remedial work beyond the project boundary is not necessary, the remedial plans do not address the extent of landslides that do not occur on the property.

1-3 See Master Response 9.5.3b.

1-4 The comment incorrectly claims that the analysis relies on one limited boring to identify the extent and shape of the landslide. After reviewing the work by Purcell, Rhoades, & Associates, the City, AKA, and PRA agreed to eight additional exploratory test pits/trenches and the drilling of two rotary wash borings. These new borings and test pits are in addition to the five borings and six test pits previously completed in the slide area by PRA between 1987 and 2006. See Draft SEIR, p. 50, par. 3-6. Also see Master Response 9.5.3a.

1-5 The values used in the PRA stability analysis were reviewed by AKA and found to be appropriate for the "engineered fill". See Appendix D-6 of the Draft SEIR. The values proposed by the commenter's expert are appropriate for evaluation of the existing materials but do not reflect the strength increase which will result from the grading operation. Therefore the values used in the analyses were deemed appropriate for evaluating the stability of the engineered buttress fill.

1-6 The commenter states that James Joyce rendered the opinion that more than one boring is needed and downhole logging is more accurate. As noted in the Draft SEIR at p. 50, par. 3, City staff met with Purcell, Rhoades & Associates (PRA) and Alan Kropp & Associates (AKA) in May 2007 to discuss geotechnical issues. It was determined by the City that additional field investigation should be conducted to

further evaluate subsurface conditions on Parcel C and the swale area covering the Parcel B/C boundary. It was agreed that additional field work would include eight exploratory test pits/trenches and the drilling of two rotary wash borings. PRA conducted the field work in July 2007. Mr. Joyce was not present at the May meeting. If he rendered such an opinion, then it his own and not that of the City. In any event, such an opinion does not make the City's SEIR inadequate. The City and AKA ultimately concluded that the subsurface investigation completed by PRA in July 2007 adequately identified the extent of the landslide features affecting the property at the tentative map stage and that additional testing, including downhole logged borings, was not necessary. See Draft SEIR, p. 50, par. 6.

1-7 The comment misstates both the factual circumstances and applicable legal principles. See Master Response 9.5.1. regarding the certification of the 1988 EIR. The standards governing subsequent environmental review in Public Resources Code section 21166 apply after an EIR has been "prepared" for a project. Case law and the State *CEQA Guidelines* make clear that certification is the triggering event for the application of the standards governing supplemental review. (See, e.g., State *CEQA Guidelines* § 15162.)

1-8 All the letters and correspondence submitted by the commenter have been included as Comment #2 in these responses to comments.

1-9 See Master Response 9.5.2. regarding the standards governing supplemental environmental review. As provided in sections 15084(a)-(b) of the State CEQA Guidelines, the City has prepared the SEIR directly with information provided by the applicant, and, in the case of the geotechnical work, peer-reviewed by the City's own expert.

Comment #2

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May 9, 2008

Christine Sinnette, Senior Planner
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Re: Leamy Subdivision MS504-87CCII
Notice of Preparation of Supplemental EIR

Dear Ms. Sinnette:

This will confirm your May 6 email, stating that the City will accept comments on the Leamy Subdivision's CEQA Notice of Preparation until June 5. You also represented that the City intends to provide a thorough analysis of geotechnical issues, including updated tests and reports and peer reviews.

My April 28 letter included a list of errors and omissions in the studies done to date, identified by Paul Seidelman. Please ensure that those issues are addressed. We also urge you to require Mr. Leamy to disclose the site evaluations and advice he obtained from Mitch Wolf of Cal Engineering and Geology, as he should not be able to conceal information that is adverse to his preferences.

As you know, last year Paul Seidelman and I submitted several letters to the City that addressed geotechnical and other environmental topics, identified problems with existing studies and Mr. Leamy's proposed design, questioned compliance with CEQA, and made various recommendations. While they should be in the City's file, to expedite your work I am attaching new copies of the following letters. In addition, I enclosed a new letter by Mr. Seidelman regarding geotechnical and related issues.

* Four letters from Paul Seidelman dated April 8, 2008; April 16, 2007; March 5, 2007; January 22, 2007
* Testimony by Paul Seidelman at the December 7, 2006 Planning Commission hearing
* Four letters from Edward Shaffer dated April 23, 2007; April 13, 2007 (Bowie rebuttal); April 13, 2007 (CEQA defects); March 5, 2007

All the information in this material should be included in the new CEQA report, and all the questions and objections should be addressed. Based on our earlier experiences with Mr. Leamy and his consultants, and the inadequate information contained in the NOP, it is essential that the

City obtain independent professional geotechnical and engineering geological evaluation of onsite and offsite impacts of this project. 2-1

I am concerned about your continued reference to preparing a "supplemental EIR." A Supplemental EIR is used to augment a previous EIR that already has been properly adopted. As I explained last year and repeated in my April 28 letter, to my knowledge the 1988 EIR was never formally certified by the City Council and it cannot be treated as such. If you have legal citations to the contrary, please supply that information so I may stop raising this question. Otherwise, the City and Mr. Leamy should recognize that an entirely new EIR must be produced, based on 2008 criteria for what is considered an adequate EIR. Finally, as requested in my April 28 letter please confirm who is preparing the EIR. 2-2

Thank you for your attention to these details.

Sincerely,

ARCHER NORRIS

Edward L. Shaffer

ELS:oev
Enclosures

C0292001/654992-1

SEIDELMAN ASSOCIATES
2427 CHERRY HILLS DRIVE
LAFAYETTE, CALIFORNIA 94549
(925) 930-0646
(925) 930-0828 (FAX)

April 8, 2008

Mr. Edward L. Shaffer
ARCHER NORRIS
2033 N. Main Street, Suite 800
Walnut Creek, CA 94596-3728
Via email: eshaffer@archernorris.com

RE: Present Status of Geotechnical Findings on Leamy Property

Dear Mr. Shaffer:

At your request, we have reviewed the most recent documents published on the Leamy property. These include a letter from Alan Kropp and a letter revising the findings of Purcell Rhoades. As a result of this additional study, Purcell Rhoades now shows a substantially increased area of landsliding that involves approximately the same area as is shown on the landslide map I produced some time ago. The new sub-surface investigation still was limited to trench investigations and exploratory borings. The exploratory boring was extended to a depth of 60 feet, and encountered a failure surface 38 feet below the existing grade. Based on a singular boring, and the surface expressions of the landslides, the estimated volumes necessary to construct a buttress for the road was increased to 63,500 cubic yards (6,000 dump trucks, loaded with 10 yards each). The geotechnical report still does not address the size and extent of the landslide which they have finally discovered. One boring indicating a failure depth of 38 feet is not sufficient to delineate a landslide. More importantly, the relationship between the deep seated landslide that they did find, and the two shallower slides situated above the existing dirt road, and the potential impacts of these three slides on both the building site and the offsite properties below are not evaluated or discussed. 2-3

In addition to the revised buttress stability analysis, slope stability analyses were performed using a cohesion of 1,200 psf, a friction angle of 18 degrees and a horizontal earthquake force of .15gs of lateral force. This resulted in a calculated safety factor of 2.5 under static conditions, and 1.5 under earthquake conditions. When cohesion is reduced to 600 psf, the safety factor is reduced to 2.0 under static conditions, and 1.24 under earthquake conditions. Their report mislabels and shows the safety factor of 1.24g, which makes no sense as a safety factor. Therefore, I am interpreting their real meaning to be 1.24 as the safety factor instead of 1.24g. This analysis leads Purcell Rhoades to conclude that the buttress they are proposing (63,500 cu. yds.) would create a slope stability safety factor of 2.0 under static conditions. 2-4

The report fails to discuss ground water conditions associated with construction of the buttress. The sub-drain system necessary to create the buttress will require removal of the water by some means to the creek or storm drain system on Soares Lane. Some manner of gravity feed will have to be achieved, and the method will require crossing private property as there is no naturally 2-5

occurring elevation on the subject lot that is sufficiently low to capture the water. The landslide safety factors do not discuss water table conditions under which the analyses were performed.

Despite its deficiencies, the present information represents a vast improvement over the earlier reports, as they have now correctly identified the approximate area of landsliding and have discovered the deep-seated (38 feet deep) landslide that, heretofore, was unrecognizable to their geologist. Unfortunately, much work remains to be done in order to fully evaluate the geotechnical parameters of the newly identified landslide. A single boring is not sufficient basis on which to complete an evaluation or design. The boring in question is boring B-2, and is located along the axis of the more westerly slide. There is still no deep boring in the upper reaches of the large slide. When earth quantities of this magnitude (60,000 cu. yds.) are being discussed, it would be appropriate to define the geometry of the two large landslides with more than one boring. Additionally, there is no information on the condition of the landslides after they cross the property line and underlie the Soares Lane properties. In other words, if the slide is entirely de-watered and a buttress is created sufficient to stabilize land areas above the landslide, what impacts might this have on the remainder of the slide that underlies properties to the southeast of the property line, and what mitigation is available to avoid damages to the adjoining properties? In this regard, the removal of water from the buttress area may have significant impacts on the Johansen property. The removal of water from nearly 40 feet of landslide that underlies the Johansen property might have a significant impact on the stability of the foundation that supports this structure. 2-6 2-7

The geometry and computer analyses have not been presented for review, so no further analyses as to their adequacy can be made. There is no basis for the numbers used by the engineer. He explained the method he used, and the parameters, but not the geometry or the soil tests. We still question the sub-surface geometry of the two large landslides and the use of large values of cohesion 600 and 1,200 psf. These are high values for long term cohesion in landslide analyses. The present literature in geotechnical engineering questions whether cohesion actually exists as a long term clay soil strength parameter. Purcell Rhoades did reduce the cohesion in their second analyses from 1,200 to 600 psf. We would advise reducing it further, to between 100 and 200 psf for a typical Orinda formation CH clay soils. 2-8

In a second letter to Mr. Robin Leamy, dated July 30, 2007, Purcell Rhoades responds to my concerns:

1. The extent of the landslides at the site have not been sufficiently mapped
2. The potential for the presence of deep-seated regional landslides beneath the landslide in the area of Parcel C
3. The volume estimates presented in the 2006 Purcell Rhoades report
4. No stability analysis of the landslides of proposed buttress fills

The letter proceeds to discuss alleged inaccuracies in the Seidelman report, brushing aside the fact that the Purcell Rhoades landslide map has entirely changed, and now depicts a 62,000 cubic yard buttress where it previously required only a 15,000 cubic yard buttress. Thus, items 1, 2 and 3 were revised and now coincide more closely with my estimates. Finally, no stability analyses of the landslides or proposed fills were included in the earlier reports, while the present report provides the results of a pseudo-study based on only one boring but no presentation of slide geometry. The slide geometry was not presented because it was not properly understood. The acquisition of a single boring is insufficient to define landslide geometry. Thus the stability analysis and most of the data it relied on must be considered as no better than a professional guess. 2-9

While the present report represents an improvement over the prior work, it still falls short of the standard of care in our industry, in that there is insufficient information on which to base a slope stability analysis.

We have discussed the field work with Alan Kropp. He assured us that Purcell Rhoades was informed that installing a couple of down hole logs would answer all the questions and provide the information necessary. However, they made the choice to continue relying only on soil borings, which are much more vulnerable to missing a thin failure surface. Additionally, only one boring was made in the obvious slide mass. No deep borings were excavated in the potential slide mass immediately west of the ravine. This area must be understood before the full extent of the buttress can be determined. These problems have gone on for months. They could be easily solved with the addition of data but for some reason the data has not been forthcoming. After nearly a year of Purcell Rhoades reports we still don't have an accurate landslide map or full evaluation of the mitigation measures necessary to develop Parcel C. 2-10

In that regard, nearly six months ago I met Mr. Leamy and advised him of these problems with the data being relied on. I informed him that down-hole logging equipment would be in the area in April, which would allow him to do additional testing to collect data and resolve the unanswered questions. It appears he is not taking advantage of that opportunity.

We have employed accepted engineering procedures and our professional opinions and conclusions are made in accordance with generally accepted soil and foundation engineering principles and practices for reconnaissance level investigations. However, we do not undertake the guarantee of land or site improvements. This warranty is in lieu of all other warranties either expressed or implied.

We hope this has provided you with the information you need to proceed in this matter. Should you have any further questions, please don't hesitate to give us a call.

Sincerely,

SEIDELMAN ASSOCIATES

Paul Seidelman
Principal Engineer
RCE 29683
GE 761
CEG 1086

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April 16, 2007

City of Lafayette City Council
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII (Barsell Property)
Geotechnical Errors and Omissions in Environmental Review

Honorable Council Members:

We have reviewed the 1988 environmental impact report (EIR) for the subject subdivision, as prepared by Duncan and Jones. We also utilized all of the Purcell Rhoades & Associates reports prepared in 1987 for the Draft EIR, in 1988 for the Final EIR, and in 2006 for the Addendum. This letter supplements our March 5, 2007 letter previously submitted as an attachment to Edward Shaffer's March 5 letter to the Council, along with my correspondence and testimony before the Planning Commission.

It is our conclusion that the landslide mapping submitted by Purcell Rhoades & Associates, does not correctly or completely depict landslide conditions, including both active and dormant landslides. Furthermore, their landslide map does not compare well with the published landslide maps for the area. Mapping by both Nilsen and Haydon show different landslide conditions at the site. This same conclusion was reached by Alan Kropp in his review of the 1987-1988 geotechnical work completed by Purcell Rhoades & Associates.

The specific omissions we found in the Purcell Rhoades & Associates mapping, include the following items:

- Their map depicts only "active" landsliding, meaning recently active landsliding in the two landslide basins that form the east flank of the property where new development is proposed.

2-11

- The landslide map fails to show the large landslide mass located to the east and north of the proposed building site on Parcel C. This large, translated slide mass extends across the property line, heading easterly until it terminates in the creek that forms the southerly boundary of Parcel C and the eastern boundary of the Johansen property on Soares Lane.

- With one exception, none of the "**dormant**", potentially active or inactive landslides are depicted on the landslide map of the two basins proposed for development. This is a serious omission as such slides must be evaluated to ensure adequate remediation to make the site safe. The standard of care for landslide mapping of proposed development areas is to include all landslides – active and dormant – including their morphologic parts, such as crown scarp, head scarp, slide mass, slide toe, areas of creep, areas of debris slides and translated or rotated masses.

- The landslide scarp, resulting from the deep-seated movement, is not presented on the landslide map.

- The geomorphic bench, designated as the building site for Parcel C, is not evaluated as a potential translated slide mass, which could present dangerous conditions for a house site.

- At least two older landslides that cross Happy Valley Road and enter onto the property are not identified or discussed in the Purcell Rhoades report. Another slide is dashed and shown as a circular mass with two arrows pointing down hill, but there is no other information on this feature.

- The trenches excavated by Purcell Rhoades are only suitable for analyzing shallow slide locations. They are not deep enough to evaluate deeper bedrock slides that affect the site. 2-11

- There has been no stability analyses performed on any of the landslide masses or the proposed buttresses that are supposed to stabilize the hill slope for construction of the roadway across the slide basins. Absent this information, and an accurate mapping of landslides, there is no way to evaluate the environmental impact associated with modification of the landslide slopes.

Purcell Rhoades has never conducted a study that would conclude definitively whether or not deep seated landsliding is present in the two landslide basins that face southward and underlie Parcels A and C and portions of B. The mapping done in 1988 was severely criticized by Alan Kropp, and was never reconciled after that review. Test pits (done in 1987-88) do not evaluate deep seated slides. Borings (done in 2006) frequently miss deep seated slides. The standard of care for evaluating deep seated slides is either down hole logging, or monitoring slope movement over a period of yearsemploying inclinometer cased holes. Down hole logging has the advantage of letting you know for certain if the slide is present, without waiting for monitoring. Purcell Rhoades has done neither. 2-12

Purcell Rhoades has carefully chosen to label its map as an "active landslide" map and has limited its work to active landslides, and to date has not investigated or produced a map showing **dormant** landslides. Dormant landslides are potentially active and require evaluation. Only a very small percentage of all landslides show recent enough activity to be classified as "active" in aerial photography review. The City and the applicant may be misled by the fact that the Purcell Rhoades reports and maps suggest they provide a complete picture of landslide hazards on the property. Alan Kropp pointed this out through his review in 1988. Mr. Kropp used such gentle language that 2-13

people may not have noticed he was not satisfied with the Purcell Rhoades mapping or their recommended landslide repairs.

We estimate that the potential landslide area of most concern contains approximately 60,000 cubic yards of soil. Properly stabilizing this hillside probably would not require complete excavation of the slide area, but would involve substantial grading on the order of 25,000 to 35,000 cubic yards to stabilize the two basins – much more than suggested by Purcell Rhoades and much more difficult to accomplish.

On June 1, 2006, Purcell Rhoades & Associates presented additional information on the proposed subdivision. The new information included nine borings and incorporated the test pit information from their 1987 report. 2-14

- Bore hole 4 is located at the building site beneath Parcel A. The building site for Parcel A is shown on the landslide map as free of landslides. However, the bore log describes the site as underlain by a 3-5 foot thick **debris flow**. Debris flows are a kind of landslide, yet no landslide is shown on the map and the report does not yield the extent of the debris slide on Parcels A and B.

- Bore hole 5 is located at the proposed building site on Parcel C. The only test information provided shows a soil moisture content of 26% at a depth of 6 feet. The boring terminates at 11 feet in what appears to be hard material; however, that depth is not sufficient to determine whether or not a bedrock landslide is present. Both the aerial photography and the contour map show this area to be a bench at the base of a very steep slope, adjacent to an obvious deep seated slide. These data lead us to conclude that it is possible, maybe even probable, that the Parcel C building site is situated on a deep seated landslide. We recommend down hole logging to determine the presence or absence of a landslide failure plane beneath this home site.

- Bore hole 6 is taken within an area designated as a landslide and is located in a mapped landslide above the proposed access to Parcel C. Only one laboratory soil test was run on the recovered samples. The test indicates a moisture content of 23% at 6 feet. More information about this landslide is needed to properly evaluate the situation, identify hazards and design remediation.

- Bore hole 7 was excavated in a slide basin in the scarp area of the landslide depicted on the Purcell Rhoades landslide map. The boring is located above the proposed road alignment for access to Parcel C. The bore hole indicates suspect material to a depth of over 20 feet. This should be recognized as a situation requiring additional investigation.

- Bore hole 8 is located just below the road alignment providing access to Parcel C. The material descriptions and test data indicate potential landslide material to a depth of at least 15 feet and possibly deeper. More investigation is needed.

- Bore hole 9 is located below the proposed road alignment for access to Parcel C. The boring was drilled to a depth of 21 feet, yet only one moisture content was obtained for the entire bore hole. The drilling became stiff at 18 feet, but all of the material above 18 feet is potentially landslide debris. There is insufficient information in the boring to be more definitive.

The 2006 report presents little new information. It proposes the same buttresses to support the roadway, with no engineering back up to determine if the buttress design is adequate. The bore hole information presents insufficient test data and lacks descriptive information that would assist in evaluating what data is provided. The map presented in the report is a modification of the landslide map in Purcell Rhoades' 1988 report. While it does show new landslides in the northerly portion of Parcel A, it does not depict the landslide under the designated building site for Parcel A that is revealed by their own bore logs. The map still fails to show the extent of the two landslide basins that terminate beneath the residences on Soares Lane and extend uphill to the proposed road on Parcel A and to the ridge above the proposed road to Parcel C. These slide basins, and their future management and development, are crucial to the stability of the existing developed lots along Soares Lane. None of these geotechnical relationships are discussed or evaluated in the most recent Purcell Rhoades geotechnical report (2006). Instead, the Purcell Rhoades report classifies the landslide condition on Parcels A and C with the statement, "susceptibility in the building areas of A and C are considered low to moderate" – a conclusion that is not supported by the evidence.

2-15

In the 1988 Draft EIR, Alan Kropp & Associates points out numerous deficiencies in landslide and topographic mapping of the proposed development. Mr. Kropp's review of the Purcell Rhoades report indicates it does not correlate with the Nilsen map produced in 1980; not all the slides are shown on the Purcell Rhoades landslide map, and not all the landslides are discussed in the Purcell Rhoades report. Additionally, the Draft EIR states, **"it should be noted that the tentative sub-division map, developed by Schell and Martin has not accurately located the active, large landslide feature."** Thus, the 1988 review of the Purcell Rhoades report concluded the landslide mapping was inaccurate in showing landslide location and landslide size, and it omitted landslides within the subdivision boundary.

In August 1988, a supplemental report was prepared by Purcell Rhoades & Associates. The report was supposed to respond to the inadequacies pointed out by the Draft EIR. The new report presented the results of 14 test pits averaging 7-8 feet deep and no deeper than 15 feet. It is instructive to review the description of the deepest materials encountered in each test pit. All of the test pits terminate in highly weathered bedrock or landslide debris. This is a condition that raises more questions than answers, as highly weathered bedrock is frequently what **deep seated** landslide debris looks like. Nothing in the 2006 report resolves this issue, as the bore hole logs continue to suggest the possibility of deep landslides or fail to provide enough detail to address the question.

2-16

On October 6, 1988, the EIR consultant, including Alan Kropp, issued a final environmental impact report, including responses to comments. There is no indication that Alan Kropp & Associates revisited the issues discussed in their earlier report or was satisfied that all the earlier problems were cured. There is discussion of the "large landslide present, immediately north of Parcel C, in the swale area". The review states, "whether the size of the current buttress fill would be adequate to withstand the lateral forces of the large landslide mass uphill, so that the driveway would remain in place if the slide began to move, **constitutes a second area of concern**." It also notes: "All of the water collected from these systems should be conveyed to Soares Lane" and "even if proper buttressing were constructed in the driveway area, the lower portions of slides, downhill of the driveway, might continue to move during future heavy rainfall periods."

In conclusion, my work and Alan Kropp's reviews conclude that the landslides associated with the proposed subdivision are not **completely** or **accurately** mapped. Mr. Kropp and I also agree that the stabilization being proposed for the active slides is not presented in the way that engineers typically design landslide buttresses. Furthermore, there is no discussion of the stability of deeper "dormant landslides" or the effects of the grading and drainage operation on the landslide deposits that underlie the Soares Lane homes.

We urge the Council to require geotechnical and geologic studies appropriate to the sensitive slopes that underlie the two proposed home sites and all of the adjoining properties above Soares Lane. Failure to properly understand the nature and extent of the slide activities could result in catastrophic loss of both the new proposed home sites and the existing properties along Soares Lane.

We point out that other portions of this property appear to be much better suited for development and would have less geologic impact than the sites being proposed. If the existing areas end up being developed with roads and houses, it should be clearly understood that significant grading and drainage improvements will be necessary to safely accomplish the endeavor, involving much more work than identified to date.

We welcome the opportunity to discuss our findings, in greater detail, with City staff or consultants.

Sincerely,

SEIDELMAN ASSOCIATES

Paul J. Seidelman

GE 761
CEG 1086
RCE 29683

557769

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March 5, 2007

W. Price, P. Colby, P. Clark, S. Klein, T. Johansen
Lafayette, CA 94549

RE: Geologic and Geotechnical Review of Proposed MS 504-87

Dear Gentlemen:

At your request, we have completed a geologic and geotechnical review for the captioned subdivision. Our work consisted of:

- Review of Purcell Rhoades geotechnical reports – 1987, 1988, 2006,
- Aerial photo interpretation, based on 1959 and 1987 stereo aerial photography from Pacific Aerial Surveys,
- Observation of the ground conditions in the field,
- Review of Environmental Impact Report, dated October 6, 1988.

Based on our work, we conclude the following:

- The landslide maps presented in the Purcell Rhoades reports are inaccurate and inconsistent from report to report and even between different landslide maps within the same report. This is evident in comparing two Figures in this 2006 report. Fig. 4 "Aerial Landslide Map" (Purcell Rhoades 2006) and Fig. 1 "Site Plan" (Purcell Rhoades 2006). These maps depict vastly different landslide conditions that may have a substantial impact on the safety of proposed building sites on Parcels A and C, as well as the resulting safety on the adjoining downslope parcels. The impact of the development on the adjacent properties is not evaluated. Parcels A and C contain landslide areas that extend onto four adjacent lots on Soares Lane. A large deep-seated landslide underlies Parcel C and significant portions of the adjacent lot on Soares Lane. Fig. 4 of the 2006 Purcell report clearly indicates large landslides that extend across the southern property line onto your parcels. 2-17

- Our interpretation of the aerial photography has some similarities to Fig. 4 (Purcell Rhoades 2006), but displays more detailed information. There is clear evidence that a large complex of landslides extends from the proposed Parcel C onto the existing lots along Soares Lane.

- Our interpretation of the aerial photography leads us to conclude that Fig. 4 in the Purcell report does not disclose all of the significant landslides in the area.

There are definite areas of landsliding that effect Parcels A and C and all of the adjoining downhill parcels. There are also areas of Parcel C that display a land form of questionable origin. The land form can be interpreted as a deep-seated, bedrock slide mass or an erosional bench – which is proposed as the house location for Parcel C. The Purcell Rhoades report does not develop or evaluate the potential of the building site on Parcel C to have been formed by landslide processes, as opposed to surficial erosional processes. Insufficient information is presented in the Purcell report to reach a reliable conclusion as to the origin of this benched area, and the failure of the report to discuss landforming processes results in a failure to evaluate the risks involved in building on the site. 2-17

- Parcel A also contains significant landslide areas that can be identified on the aerial photography but are not presented in Site Plan Fig. 1. Our work indicates that the landsliding is more substantial than shown on Fig. 1. While Fig. 4 does show the gross landslide area, details of the landslide boundaries are not accurately identified.

- In my opinion, it appears technically feasible to mitigate landslide conditions on Parcel A in order to safely develop that site and protect your downhill properties, but it will require much more extensive drainage facilities and grading than Purcell Rhoades suggests are needed. 2-18

- Mitigation of landslide effects on Parcel C is highly questionable unless **massive** grading and drainage measures are undertaken. Purcell Rhoades fails to recognize the severity of the problem, and does not address the full extent of mitigation work needed to make the area safe. For example, stabilizing the deep-seated slide or bench area may require re-grading between 10,000 and 40,000 cubic yards of landslide debris, over an area of 1 to 1 ½ acres. These estimates do not include the proposed house site on Parcel C which has topography that may be indicative of additional deep-seated sliding that would require 10,000 to 20,000 cubic yards of additional grading work. 2-19

- On both Parcels A and C, the necessary mitigation measures far exceed those discussed in the project EIR or the Addendum and, in our opinion, the feasibility of safely developing Parcel C as depicted, is highly questionable. While Purcell Rhoades estimates that development of the homesites might require 2,000 cubic yards of road grading, properly stabilizing the landslides on Parcels A and C could involve excavating and recompacting as much as 50,000 to 60,000 cubic yards on the two parcels and the roadway. The EIR fails to recognize this potential or evaluate the much greater construction-related impacts on neighbors (dust, noise, erosion). 2-20

- We do see the possibility of adjusting the three parcels in a manner that can provide the same number of building sites, while avoiding the most difficult landslides to mitigate. There is insufficient information on the existing parcels to determine the best configuration for obtaining the three desired homesites. Moving the homesites on Parcels A and C from the landslide basins onto the bedrock ridges, or immediately north of the bedrock ridges, would provide a much more stable geologic environment and less disturbance of the land. 2-21

Attached, please find a copy of our interpretation of the aerial photos for Parcels A, C and portions of B along with the existing Soares Lane lots.

We understand there is controversy over the safety and nature of the mitigation measures recommended for the proposed lots. We welcome the opportunity to sit down with a skilled engineering geologist (California CEG), experienced in the interpretation of aerial photography, to discuss the difference in findings between the various maps being presented for the property.

Purcell Rhoades has disputed my assertion that there are deep-seated landslides or other serious landform problems on the property. However, according to their reports neither they nor the 1988 peer review by Alan Kropp and Associates actually examined stereo aerial photography. I am confident that a competent professional viewing these photographs will reach the same conclusions and identify the same undisclosed hazards. The City should not allow this project to proceed or approve the tentative map without making that effort and then fully evaluating the consequences – which may include substantial new mitigations and major redesign of the project.

We have employed accepted engineering procedures and our professional opinions and conclusions are made in accordance with generally accepted soil and foundation engineering principles and practices for reconnaissance level investigations. However, we do not undertake the guarantee of land or site improvements. This warranty is in lieu of all other warranties either expressed or implied.

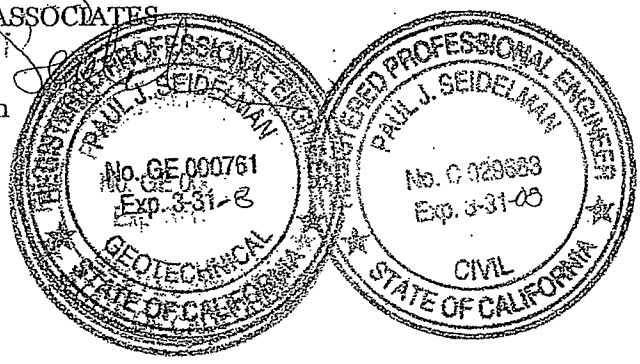
We hope this has provided you with the information you need to proceed in this matter. I understand the City Council is scheduled to consider approval of this application on March 12; I will be available to attend that hearing to speak and discuss our findings.

Should you have any further questions, please don't hesitate to give us a call.

Sincerely,

SEIDELMAN ASSOCIATES

Paul Seidelman
Owner
RCE 29683
GE 761
CEG 1086



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RECEIVED
JAN 24 2007
CITY OF LAFAYETTE
PLANNING DEPT.

January 22, 2007

Niroop Srivatsa
Planning & Building Manager

Ann Meredith
Community Development Director
City of Lafayette
3675 Mt. Diablo Blvd., # 210
Lafayette, CA 94549

Re: MS 504-87 APM 247-010-019 & 020

Dear Ms. Srivatsa and Ms. Meredith:

Mr. Walt Price of 4115 Happy Valley Road, Lafayette, asked me to write concerning a proposed minor sub-division of the captioned property. We reviewed the soil report prepared by Purcell Rhoades & Associates. As you may recall from the recent meeting on the sub-division, I testified concerning geotechnical information that I had obtained during my studies of Mr. Price's property, pursuant to the repair of active landsliding that affected a wide slope front adjacent to his house. We had some time earlier, reviewed geotechnical conditions on APM 247-010-018.

As I discussed at the meeting, we found extensive shearing of the bedrock beneath the shallow landslide adjacent to the Price residence and above his golf tee. The bedrock was apparently part of a larger landslide that underlies tens of acres in the area. The larger slide is probably responsible for the apparent bend in the creek at the base of the slope. Additional landsliding had been noted on the adjoining parcel several years earlier by this geologist. The sliding on that property is a more traditional, deep-seated translational slide, with a classic slide bench and scarp area. These features are present on parcels adjoining the proposed sub-division.

At the meeting, we voiced our concern that the geotechnical reports prepared for the minor sub-division were based on shallow borings and trenches that did not characterize bedrock conditions in the area. Bedrock conditions at the sub-division site may be better than at the Walt Price property or the conditions at his

2-22

ATTACHMENT E

neighbor's property, but the report issued for the sub-division completely ignored deep-seated, bedrock sliding. The report does not provide sufficient information to determine whether or not the conditions noted on the two aforementioned parcels extend uphill onto the sub-division parcel. Our work with aerial photography indicates portions of the sub-division property appear to be outside of land features associated with deep-seated, earth movement. However, there are also considerable areas where it appears questionable or likely that deep-seated sliding underlies the proposed sub-division. It seems that additional information is essential to understand the best way to manage the adjoining parcels. As we have stated, this does not mean that the conditions are necessarily dangerous; only that they are not properly analyzed, given the close proximity of bedrock sliding. Mr. Price has offered my services to discuss this issue further with you and the sub-division applicant and their engineers.

We hope this has provided you with additional information that will be useful in processing the application for the sub-division. Please give us a call if you have any questions.

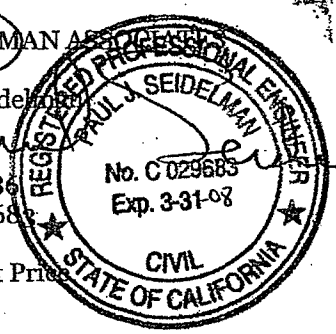
Sincerely,

SEIDELMAN ASSOCIATES

Paul Seidelman

GE 761
CEG 1086
RCE 29683

cc: Walt Price



Mr. Gong indicated he personally has not since he is too involved in his business to watch over what a neighbor might do that could affect his property.

Paul Seidelman indicated he is present at the request of Walter Price who owns a large parcel in the area. He has been practicing soils engineering in this community for 27 years. Three years ago, he had the occasion to look at the slide on Mr. Price's property. There appeared to be a cut slope that was 3 horizontal to 1 vertical. He did some test pits and a boring and determined that it looked like the failure surface was 12 to 15 feet below the ground surface. This slide was over 150 feet wide and on a 3 to 1 slope and it's immediately below the property in question. After a long permit process, they commenced repair on the slide and what they found when they got through this surficial slide was very strong evidence of a major deep-seated bedrock landslide. They found fractures in the clay stone that were slick inside it; they have been polished and rubbed together. There was evidence that this slide was very large, perhaps covering 15 or 20 acres. It doesn't show in any of these reports. In fact, all he sees in the reports is a mapping of surficial slide deposits. He also looked at the property to the north of Mr. Price's property and found also in that area deep-seated landslides. He would strongly suggest that an independent expert be retained to look at this landslide mapping. He does not believe the reports accurately reflect the geology of the area. He does not think they are showing some very large slide features that are potentially very troublesome.

Chair Ateljevich asked Mr. Seidelman if he read the Purcell & Rhoades report and if there was a problem with the depth of the borings.

Mr. Seidelman indicated he has read the report. In this case, he thought he had good bedrock at 12-15 feet. When he saw the bedrock at 12-15 feet, it told him something much larger is going on in the area. It can be seen in the alignment of the creek, at the base of the slope. The creek at the base of the slope has been pushed over millennia into it's present position by large scale deep-seated slide movement. It needs to be evaluated. If anyone is going to do anything, it might add water to the fissures in that bedrock.

Commissioner Chastain asked Mr. Seidelman how he would actually investigate this procedurally.

Mr. Seidelman said the best way to evaluate a deep-seated bedrock landslide is to bore and log. You create a 30-inch diameter hole that goes 70 to 80 feet deep to log the entire hole. This should be done at two or three locations for a slide of this size in order to understand it. It's the only way to definitively get to the bottom of this kind of a slide complex and then do an analysis to find out how vulnerable it is to movement.

Commissioner Holt asked Mr. Seidelman if he would offer an opinion on the alleged deforestation and how it impacts the drainage runoff.

Mr. Seidelman said in general, deforestation has an impact on the amount of runoff that occurs from smaller storms. It does not have very much impact on the amount of run off that occurs in large storms with high antecedent soil condition. The storms that cause the floods around here usually occur after we have a very high antecedent moisture condition in the soil when everything is saturated and almost everything runs off.

Commissioner Harris asked Mr. Seidelman if he can point out on one of the charts where he discovered the bedrock slides.

Mr. Seidelman said the last driveway on Soares going up the hill to the adjacent property had a deep-seated landslide line. In relation to the Price residence, there is a large slide in that area and there is another one on the other side of the ridge that the residence is on in the ravine.

Chair Ateljevich asked if it was his implication that drainage in fissures would cause grave problems.

Mr. Seidelman said you would have to first know for certain whether or not that parcel had a deep-seated bedrock slide on it. If it doesn't, then it negates everything that he's talking about. If it does, then that is part of this larger complex that is possibly there. When development is introduced to it, they usually landscape and they water. So instead of things drying out during the summer months – it pulls the moisture and the soil up. You don't get that drying out that occurs normally in our climate and you go into winter with the fractures filled with water and that primes the canyon for a problem. But he doesn't see the kind of investigation that answers that question given the proximity of two other deep-seated slides and the overall topography in the area. He would like to see answered before more people are put in that basin.

Vice Chair Mitchell asked if a 100-year event as indicated in Condition 31 is a reasonable standard for drainage.

Mr. Seidelman replied that is the FEMA Standard and that for residential properties, it is actually higher than the FEMA standard.

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April 13, 2007

VIA EMAIL AND REGULAR MAIL

City of Lafayette City Council
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII (Barsell Property)
Fatal CEQA Defects Require a New EIR

Honorable Council Members:

The City Council previously postponed its March 12 hearing for the above-referenced subdivision, and a new hearing may be scheduled in the near future. We represent 5 Lafayette families who live next to the proposed development. They fear harmful effects on their homes and families if this project is built without proper study and careful design.

I sent a letter dated March 5 that describes the many defects in the process being followed by the City. I will be submitting a separate letter that responds to one from the applicant's attorney. **We ask the Council to consider all three letters before making its decision.**

The City is being asked to approve the subdivision based on a 1988 environmental impact report (EIR) plus a new addendum. There are defects that make those documents legally inadequate under the California Environmental Quality Act (CEQA). Any approval relying on that material will be indefensible and easily overturned in court. We urge the Council to require a new EIR that satisfies current CEQA requirements. **At a minimum, before approval there must be proper analysis of landslides and identification of needed mitigations**

The City has been misled by claims that the 1988 EIR cannot be challenged and must be treated as complete and adequate. As my March 5 letter explains (see #8), this only applies if an EIR **was used to support an approval.** The Planning Commission recommended certification in 1988, but the City Council denied the subdivision. There was no approval to challenge in court, so no opponent could file a lawsuit criticizing the EIR. The EIR was never certified and the "deemed adequate" rule does not apply. 2-23

The 1998 document is simply an old environmental report that may be considered as part of the background information, but without any special deference. That old report together with the addendum must be treated as a new draft EIR and judged against 2007 standards for what CEQA considers adequate. **As described below, it fails that test.**

Summary of CEQA Defects.

1. **No notices or circulation for public review.**
2. **Initial Study is inadequate.**
3. **Cumulative impact analysis is out-of-date.**
4. **Addendum doesn't cure EIR defects.**
5. **Risk of deep landslides has been ignored.**
6. **Drainage studies are out-of-date.**
7. **No discussion of construction-related impacts.**
8. **No public review of revised plan or its CEQA analysis.**
9. **No solution for drainage of road buttress.**
10. **Road buttress design too preliminary to determine grading needs.**
11. **Need to study alternative that avoids serious problems.**
12. **No mention of creek impacts or need for State approval to alter the creek.**
13. **No support for claim of no impact on wildlife.**
14. **No list of required approvals or intended uses of the EIR.**

1. **No notices or circulation for public review.** As a preliminary matter, CEQA requires specific steps before a project may be considered for approval. Lafayette has not followed that procedure in this new 2006-2007 application review. First a Notice of Preparation must be published giving the public an opportunity to recommend topics for the EIR to address – to make sure no issue of concern to the community is ignored. After the draft EIR is prepared a Notice of Availability is distributed and the report is made available for at least 45 days for public review and comment. Then the City must prepare responses to every comments. Next the Planning Commission and City Council must consider if the EIR is adequate. Finally the Council is allowed to decide whether to approve the project. None of these steps have been followed in this case. I reviewed the City files and did not see any evidence of required CEQA notices – not even to other local or state agencies. The new addendum proposes substantial changes to many of the mitigation measures proposed in 1988, which require public review under CEQA. We note that the addendum – which must be treated as part of the draft EIR – was revised between the December 7, 2006 and February 1, 2007 Planning Commission hearings, without any notice or public opportunity to comment on the changes, and without even a redline version to alert the public or the Commissioners of what the changes were. 2-24

2. **Initial Study is inadequate.** The 1988 EIR focused on a limited number of topics. CEQA allows this focus if other potential categories of environmental impact are thoroughly evaluated and dismissed through an "initial study." However, the initial study used 2-25

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in this case was a barebones checklist with only 1/2 page of discussion. That may have been enough in 1988, but since then the courts have rejected such skimpy explanations. Even the list of topics covered would not pass muster under current regulations. A new initial study is needed if the applicant wishes to produce a new, up-to-date, legally adequate EIR.

3. **Cumulative impact analysis is out-of-date.** The 1988 EIR described anticipated future development in the vicinity and evaluated cumulative impacts. This portion of the study must be updated to recognize what has been built in the past 19 years and what new construction now is anticipated by Lafayette and Orinda. The addendum's limited analysis focuses on the property and does not attempt to identify existing or anticipated development in the vicinity as of 2007 or to update discussion of the cumulative impacts. 2-26

4. **2007 Addendum doesn't cure EIR defects.** The new addendum limits its discussion to the topics covered by the 1988 EIR, so it does not solve the problem of relying on the old, bare checklist initial study for ignoring other impact categories. It also is written from the narrow test used to decide if a subsequent EIR is needed (see p.7 "Summary") – which does not apply because we are not dealing with an already certified EIR – and does not update all the analyses to 2007 standards. It is unclear if the addendum applies current City of Lafayette general plan and zoning regulations or relies only on the outdated standards – especially regarding the hillside ordinance. The addendum also judges impact categories by comparing the current project (three parcels) with the 1988 version (up to seven parcels). It then dismisses the question of impacts by stating that there will be less of a problem than originally studied – which is not the right standard to use in this case because the 1988 EIR was never certified. 2-27

5. **Risk of deep landslides has been ignored.** My clients' geotechnical consultant Paul Seidelman testified before the Planning Commission and has submitted letters to the Commission and to the Council (all incorporated into this letter by this reference). He explains that the work done by the applicant's consultants does not satisfy current standards and fails to evaluate deep landslides and other features that pose a credible risk of harm to project residents and their neighbors. The 1988 peer reviewer recognized this problem with the Draft EIR study, but it has not been corrected. It is important to note that Alan Kropp, the City's expert, did not critique the supplemental report done by the applicant's consultant for the Final EIR in 1988 or the 2006 study that the applicant has submitted for the addendum. The Planning Commission was misled on this point, believing that Mr. Kropp had reviewed and approved all the studies. 2-28

It is not sufficient to simply adopt mitigations stating "study the property before building and redesign as necessary." Confirmation of deep landslides likely will require significant changes to project design and mitigation measures. Those changes themselves may create new impacts that must be studied and exposed to public review. For example, repairing deep landslides to make the entry road and homesites safe may require 15-30 times more grading than predicted – causing air quality, noise and other problems. More extensive landslide repairs may require tree removal and other habitat impacts where none is predicted now. CEQA does not allow the City to carry out this followup process without public review, even if there will be

a new geotechnical peer review. Even if it did, the Council must have accurate information about all major impacts of the project before it makes a decision.

6. **Drainage studies are out-of-date.** The addendum (p.13) relies on data from the 1988 EIR for assumptions of "existing" runoff. There is no evidence that 2007 conditions or potential cumulative problems have been evaluated. Furthermore, drainage solutions might become more complicated if deep landslides must be remediated (e.g., onsite percolation is prohibited to avoid triggering a slide). The basic assumptions supporting the EIR and addendum's stormwater plans may change. The new analysis must be open to public review now – not after project approval. 2-29

7. **No discussion of construction-related impacts.** Construction of the project will involve substantial excavation and grading work for the landslide remediations, plus drainage improvements. The EIR and addendum do not consider the potential for adverse impacts on neighbors and the environment (e.g., dust, noise, construction equipment emissions, risk of triggering slides, drainage problems). This is a common topic of EIRs and must be addressed. This issue becomes even more critical if proper evaluation of deep landslide risks determines that much more extensive work is needed. 2-30

8. **No public review of revised plan or its CEQA analysis.** The applicant submitted a revised plan late in Fall 1988, after the Draft EIR was circulated. The Final EIR included a brief evaluation of plan changes and their effect on impacts and mitigation measures. Neither the revised plan nor its environmental review have ever been circulated for public comment as required by CEQA when plan changes raise new impact concerns. For example, according to the Final EIR (pp.13-14), the buttress plan and new road alignment will increase visual impacts on residents of Soares Lane and travelers along Happy Valley Road, and the new addendum provides additional analysis of those views, but the public has not had an opportunity to comment on this change or the visual studies – as required by CEQA. 2-31

9. **No solution for drainage of road buttress.** The revised plan proposes a buttress supporting the access road with subdrains. The Final EIR's review of that new plan states (p.12):

> Subsurface drainage would be provided in both of these areas and proper discharge of this subdrain water, as well as surface drainage controls where the road crosses the swale area, must also be provided. **It is not clear where the collected water from these systems would be discharged.** The EIR Consultants recommend that a drainage easement be obtained from one of the adjacent property owners to the south so that all of the collected waste can be transported to Soares Lane and properly discharged. (emphasis added) 2-32

My clients have not been asked to provide any such drainage easement, the applicant currently has no right to route this new drainage across their properties, and to our knowledge no

alternative drainage arrangement has been made. Thus there is a serious open question as to whether the proposed road buttress drainage can be handled properly. There is no information regarding the volume of new drainage involved or the size of channels or pipes needed. We question if the analysis of stormwater runoff and downstream effects on area creeks included this additional drainage. CEQA does not allow approval before resolving such a fundamental issue.

10. Road buttress design too preliminary to determine grading needs. The Final EIR also expressed concern that the buttress plan assumed too little grading. It states (p.12): 2-33

> The current plans show that the excavation would consist of a relatively shallow key and bench system with a maximum excavation of about five to ten feet (although a note indicates that the actual depth would be determined by the soil engineer at the time of construction). It appears that the excavation may need to be substantially deeper, particularly near the entry location where an old landslide deposit may be located and near the western terminus of this roadway where a significant swale is crossed.

The applicant claims that all the geotechnical remediation plans were reviewed and approved by the City's expert Alan Kropp. In fact, the Final EIR expresses grave concerns that have not yet been addressed. The updated plan used the buttress idea as an alternative to removing and compacting the entire landslide that the road will cross. However, the EIR consultant questioned if this plan would prevent material from sliding down from above and covering the road (p.12). The Final EIR goes on to voice questions and concerns by Mr. Kropp (p.13):

> Whether the size of the current buttress fill would be adequate to withstand the lateral force of the large landslide mass uphill, so that the driveway would remain in place if the slide began to move, **constitutes a second area of concern.** The geotechnical consultant for the preparation of the EIR [Mr. Kropp] believes that the buttress fill would have to be significantly larger than currently shown in order to provide full protection for the driveway.

Mr. Kropp then suggested that a second buttress area is needed but not proposed, to protect the road where it crosses the southern slide area. He noted that this would result in even more subdrain volume, and the added water also would need to be routed down to Soares Lane. As the Final EIR notes (p.14), Mr. Kropp recommends more extensive slide repair work. Finally, the EIR warns (p.13) that "the lower portions of the slides downhill of the driveway might continue to move during future heavy rainfall periods" and could damage downhill areas – possibly affecting my clients' properties if the area is not properly repaired. This hints that the driveway buttressing proposal – which Mr. Kropp considered inadequate – might actually aggravate downhill conditions and increase the risk of harm to my clients.

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To our knowledge none of these details have been researched or resolved. Mr. Kropp's questions remain unanswered. If Paul Seidelman is correct and there are deep landslides that will require additional remediation, then the problems of additional grading and drainage become even more serious. Where the amount of excavation involved may change by orders of magnitude, and there is no clearly feasible plan for drainage control, CEQA does not allow delaying the analysis of grading and its impacts. The Council and the public must have an opportunity to review and critique this information before considering project approval.

11. Need to study alternative that avoids serious problems. CEQA requires an EIR to study alternatives that allow some development but avoid significant impacts. The 1988 EIR only studied minor changes to the project, shifting its roadway entry point and moving home sites and lot lines slightly. The new EIR should include an alternative that avoids all or most of the serious geotechnical problems, including the extensive remediation needed to deal with deep landslides and the expanded buttress and grading work recommended by Alan Kropp to make the long roadway safe. This may include eliminating Parcel C at the end of the road. This is a reasonable alternative for the City to consider. 2-34

12. No list of required approvals or uses of the EIR. CEQA requires an EIR to contain various details that are missing from these documents. For example, there is no discussion of other required approvals besides subdivision that may rely on the EIR. At a minimum that may include the Department of Fish and Game, once they are informed of the plan to alter the creek as described in #13 below. 2-35

My clients do not oppose all development of this property, so long as it is reasonable and safe. Their only concern is to protect their homes and families from geotechnical and drainage impacts – not create additional obstacles for the Leamys. They were reluctant to mention the following two criticisms regarding impacts on creeks and wildlife. However, these two issues constitute serious defects under CEQA that must be raised before the Council to preserve our right to use them in court if the City approves the subdivision without a proper new EIR.

13. No mention of creek impacts or need for State approval to alter the creek. The EIR recommended clearing portions of the creek and installing rock within the creek to improve runoff volume (p.59). The addendum repeats the requirement (Mitigation 12 on p.14). Work like this done within a creek requires at least a streambed alteration agreement with the California Department of Fish and Game, and perhaps approval by other resource agencies. However, neither the 1988 EIR nor the addendum study the biological or water quality impacts of such work or even mention this as an issue. The EIR discusses biological resources on the property and recognizes riparian vegetation along the creek – which is considered an important habitat resource. But neither the EIR nor the addendum consider the biological impacts of this creek work or recommend mitigations for those impacts. There is no indication that any other agency was consulted regarding this creek work. These are significant CEQA defects. 2-36

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14. **No support for claim there will be no impact on wildlife.** The addendum (p.16) contains very brief statements that the property contains no habitat for Alameda whipsnake or California red-legged frog, two species always studied in detail by EIR for development in this region. The documentation regarding the whipsnake is somewhat brief. More significantly, the red-legged frog is dismissed based on one sentence in a consultant's letter stating "No suitable habitat for this species occurs on or near this site". There is no description of what is considered "suitable habitat" compared to the project site. The consultant does not mention that both breeding habitat and foraging habitat are important and must be considered – in fact, it is impossible to tell which type of habitat the consultant was evaluating. There is no recognition that creeks cross through or near the property – an important detail in evaluating frog travel patterns through an area. The report does not even identify the closest known sightings of red-legged frog – a basic fact provided in every EIR addressing the topic. The analysis of wildlife fails to satisfy 2007 CEQA standards. 2-37

The applicant has no absolute right to subdivide this property to build three houses, or to place them where he wants. The City has authority under CEQA and state subdivision and land use law to relocate or reduce the number of lots, or even restrict use of the parcel to one house if that is the most reasonable solution after considering all the environmental concerns.

Very truly yours,

ARCHER NORRIS

Edward L. Shaffer

ELS:oev
cc: (all via email only)
Mala Subramanian, City Attorney
Steven Falk, City Manager
Joanne Robbins, City Clerk
Christine Sinnette, Senior Planner

Peter and Susan Colby
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Tim Johansen and Mary Hartfield
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April 13, 2007

VIA EMAIL AND REGULAR MAIL

City of Lafayette City Council
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII (Barsell Property)
Rebuttal to David Bowie's Response Letter

2-38

Honorable Council Members:

On March 5' 2007 I submitted a letter to the City Council on behalf of five families living next to the Leamy/Barsell property, raising detailed objections to this proposed subdivision and its approval process. On March 13 the City received a letter dated March 6 from David Bowie, an attorney who apparently is representing both Mr. & Mrs. Leamy and John Barsell. While I appreciate that the City Council would prefer not to be in the middle of an exchange between attorneys, I must respond to Mr. Bowie's attempt to rebut my criticisms.

Mr. Bowie argues that the City has no discretion and must approve this subdivision. He is wrong on both points. However, more significant is what is **missing** from his letter.

- He fails to address that there has been no peer review of the 2006 geotechnical studies, and the 1988 peer review was critical of the consultant's work.
- He ignores the EIR defect that all of the test pits and borings were too shallow to prove there are no deep landslides on the property.
- Mr. Bowie's letter does not even mention my criticism that the 1988 EIR was never properly certified and therefore cannot be treated as beyond attack.
- He does not disagree with my conclusion that City standards were not frozen as of 1987 and current regulations must be applied – including the hillside ordinance.
- He claims the settlement agreement was legally approved by the City but offers no proof.

- The letter does not even try to rebut that the supposed "preliminary approval" in 1994 had no legal significance and has no effect on what the City decides now.

- He ignores the fact that both the settlement agreement and the preliminary approval state the City Council still has authority to decide "whether or not to approve the subdivision".

- He makes no effort to explain why Mr. Barsell took no action on this project for ten years, so any possible rights to develop expired many years ago.

By his silence on these critical questions, we must assume that Mr. Bowie agrees with my conclusions and has no good response.

Mr. Bowie states: "This is only a subdivision of property; more detailed soils studies will certainly be undertaken as a part of any actual construction process itself." This is a weak attempt to excuse the lack of studies. It only highlights the CEQA deficiency and supports our position that the parcel map cannot be considered for approval yet.

- First, we have no assurance that future studies will include what is needed to determine the existence and location of deep landslides. In fact, the conditions of approval suggest they will only be testing the shallow slides already identified, not exploring the location of likely deep landslides identified by Paul Seidelman.

- Second, in a project with only one access road and limited sites to build houses safely, approval now would be premature. When future tests discover serious problems, they may trigger wholesale changes in the development plan – such as moving the road or eliminating a parcel as unbuildable.

- Third, the actual mitigation needed to fix a deep landslide may require 15-30 times as much grading as now proposed. This would be a serious change in the impacts of the project that must be considered before subdivision approval, not after.

CEQA allows the City to delay studies if at the worst they may lead to minor tweaking of design details and mitigations. However, the law and the courts do not permit deferring work that is so basic it may make the entire project design unworkable and force major changes to the layout of development or the magnitude of grading.

According to Mr. Bowie, the property owners are "entitled" to a much larger subdivision and the City would be "compelled" to approve it – even if it is for 11 houses! He claims that the Leamys have the absolute right to develop the property as they propose. This posturing should not be taken seriously. While a landowner may be able to use his property to some degree, there is no guarantee it can be subdivided according to his whim. Development is a privilege, that

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must be balanced against the need to protect the health and safety of neighbors. Mr. Bowie cannot bully Lafayette into ignoring CEQA and City regulations.

After getting his "preliminary approval" in 1994, Mr. Barsell waited 10 years without making any effort to complete the process or even tell the City he still was working on the project. By delaying so long, he did not show good faith in trying to satisfy the City's conditions or finalize his approval. He forfeited any rights or privileges he may have gained so long ago. The City owes him no special status, and must treat this as just a new subdivision application.

We sympathize with Mr. and Mrs. Leamy for being placed in this awkward situation, but they must abide by CEQA and land use law if they want to develop this property. The City must process this as a new application, with no special treatment. As described in my separate letter sent earlier today, a new EIR is needed before the City can act.

Very truly yours,

ARCHER NORRIS

Edward L. Shaffer

ELS:oev
cc: (via email only)
Mala Subramanian, City Attorney
Steven Falk, City Manager
Joanne Robbins, City Clerk
Christine Sinnette, Senior Planner

Peter and Susan Colby
Peter and Martha Clark
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April 23, 2007

VIA EMAIL
City of Lafayette City Council
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII (Barsell Property)
Request for Next Staff Report

Honorable Council Members:

The City Council is scheduled to hear this matter tonight, and then continue the hearing to May 14. We ask the Council to direct staff to provide the following documentation for the next hearing. Please note that this may require changing the next hearing date.

1. **Respond to comments on the 1988 EIR as well as on the addendum.**
2. **Respond to each of the 11 comments in my March 5 letter.**
3. **Provide new materials early enough for adequate review.**
4. **Provide marked documents showing changes from the previous draft.**

1. Respond to comments on the 1988 EIR as well as on the addendum.

2-39

At the top of page 4, the staff report explains that Alan Kropp is performing some new peer review, and the CEQA addendum will be revised to reflect his conclusions. It then states that staff will include information in the addendum necessary to address "comments received regarding the project and on the addendum to the EIR."

What is missing from this work plan is that the City also must respond to comments concerning inadequacies in the original 1988 EIR. The City has received detailed comments and criticisms of the EIR (see the letters attached to the Staff Report from Paul Seidelman and me). As explained in my March 5 letter, the 1988 EIR is not "deemed adequate" and immune from attack. Because it was never used to support a project approval, the time has never been ripe to file suit challenging the EIR. It must be freshly examined and brought up to proper legal standards before the City can use it to approve this project. The City Attorney should be able to explain the proper requirements under CEQA and the current legal status of that 1988 report.

details, especially if we only have a few days between receiving the new report and the next hearing. Such a situation would expose the City to criticism for playing "hide the ball".

Staff did not provide a markup of the addendum between the Commission's December and February hearings. That must have made it more difficult for the Commissioners to review earlier changes and certainly complicated efforts by the public to find and consider alterations in the environmental analyses and conclusions. It took me several hours to review the February update to the addendum for this reason. It also took me almost an hour to compare the new conditions of approval in the staff report with the February version, to find the five new conditions and several wording changes recently made. It makes me wonder if the applicant and his attorney also were kept in the dark about changes to these two documents, as the public files don't show any markups being sent. This is a reasonable request, easy to satisfy with modern word processing software, and important to facilitate meaningful public participation.

Very truly yours,

ARCHER NORRIS

Edward L. Shaffer

ELS:oev

cc: Mala Subramanian, City Attorney
Steven Falk, City Manager
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Paul Seidelman

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March 5, 2007

VIA EMAIL
City of Lafayette City Council
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549

Re: Leamy Subdivision MS504-87CCII (Barsell Property)
Request to Postpone March 12 Hearing

Honorable Council Members:

I represent ten Lafayette residents who live next to the Barsell/Leamy property. My clients retained our firm after the Planning Commission did not seriously consider their objections. This made them realize the City might actually approve this project as-is, without recognizing there may be deep landslides on the site and other problems. They also hired a geotechnical specialist (Paul Seidelman) to advise them and provide information to the City. Attached to this letter is a brief report from Mr. Seidelman with his preliminary conclusions regarding landslides, needed mitigations and safety concerns. These two letters summarize the concerns and questions we have identified to date.

We ask the Council to postpone its March 12 hearing. During the past week I have been working to understand the history and legal status of this project. Frankly, I am puzzled about several aspects of the situation. I have reviewed planning department files and spoken with staff, but certain key questions remain unanswered. The Council should not proceed until it has resolved these issues.

We rushed to submit these materials on March 5 to make the deadline for the Council packet, so you will have enough time to consider our comments. We will continue working to clarify issues and prepare more documentation for your March 12 hearing. We understand that you dislike receiving written material right before the hearing, and we regret being forced into that situation. Therefore we suggest postponing the hearing not only to give us more time, but to allow staff to fully respond to our comments. This project has been under consideration for many years; a short delay will not impose a burden on the applicant.

I understand that only three of the five Council members will be present at the March 12 hearing. This is another reason to postpone the hearing. The full Council should be available to

consider these issues, weigh the risks of approving versus denying the project, and give direction to City staff.

✓ 1. **City has discretion to deny project.** It was apparent that the Planning Commission believed it had no choice but to approve the project, and their only discretion involved tweaking the conditions. For that reason they did not seriously consider the objections raised by my clients and other members of the public. This is wrong. First, the settlement agreement with John Barsell states that the City Council shall hold a public hearing and *"make its determination whether or not to approve the subdivision."* Second, the City Council's 1994 motion to preliminarily approve the subdivision states that after the project satisfies certain threshold requirements and detailed conditions are prepared, *"the City Council of Lafayette retains final approval on whether to approve or disapprove the three-lot subdivision."* The City has full discretion to deny this application. The City Council now can vote for denial, or refer it back so the Commission may properly evaluate the issues being raised, receive more detailed staff input, and then give the Council the guidance and recommendations you deserve.

✓ 2. **Settlement Agreement should be ignored if it is not legal.** I searched planning department files for more information on when and how the settlement agreement was approved by the City. I was amazed to find no information. The document is not dated and none of the persons signing entered a date in the blank next to their name – which is very peculiar. There are clues that it happened in early 1994, but nothing definite. I also could not find any evidence that the City Council considered and voted to enter into the settlement agreement during an open public hearing. In fact, the planning files do not even show that it was approved during a properly conducted closed session meeting. Senior Planner Christine Sinnette agreed with me that the planning files do not contain any information on the exact date of the settlement agreement or the procedure by which it was approved by the City Council.

Just one year ago, a California court invalidated a settlement agreement between a city and a developer because it was approved in a closed session, in violation of the open meeting requirement of the Brown Act. *Trancas Property Owners Association v. City of Malibu* (2006) 138 Cal.App.4th 172. This case and earlier court decisions make it clear that while such a litigation-related matter may be discussed in closed session, it is not legal unless its terms are discussed and open to public input. Unless the City complied with the Brown Act, its approval of the settlement agreement was invalid and the agreement cannot be enforced against the City.

✓ 3. **Ignore 1994 action because it was not a legal approval.** On July 25, 1994, the City Council held a hearing to reconsider its denial of the subdivision. According to the minutes, after the public testimony the Council adjourned to closed session. Afterwards, the Council immediately adopted a motion to *"preliminarily approve"* the subdivision. There is no such thing as "preliminary approval" of a subdivision. State law and the City Code only recognize approval of parcel maps, tentative maps and final maps. The City Council's action did not constitute a legal approval of the subdivision or grant the applicant any rights. Again, I searched the planning files for any information on the origin of this strange form of action. I found no staff report, or City Attorney opinion memo, or even recommendation from the applicant

suggesting this approach or defending its legality. The minutes do not mention the Council adopting any findings to support the supposed approval, and do not include any reference to CEQA or sign that the Council considered the EIR in making its decision. There also is no signed resolution or other formal document evidencing the action. At most it might be considered an informal recommendation to the applicant as to how he should proceed and how the City might handle his future new application. Thus the City Council need not feel bound by the pseudo-approval action in 1994.

4. **Any actual approval in 1994 has expired.** Even if the "preliminary approval" in 1994 was valid, it has long since expired. The application was for a three-lot parcel map. Under state law, after map approval the applicant has at most two years to satisfy conditions and file for recordation, unless a short-term extension is approved. There is no evidence the applicant requested any extension. Under state law, only a development agreement has the potential to freeze city regulations or keep an interim preliminary approval alive this long – and the settlement agreement does not qualify for that purpose.

If the City actually had approved the parcel map in 1994 as the applicant requested, its power to protect the applicant from new regulations would only have lasted a few years. Clearly, the City Council intended its peculiar "preliminary approval" vote to mean something less than outright map approval, and to provide some lesser level of privilege. The applicant cannot use it to claim a permanent moratorium on new regulations.

5. **No vested rights protection against current regulations.** The City has been told that it is limited to applying the regulations in effect as of July 15, 1987 – the date that the application for MS504-87 was deemed complete. In fact, the applicant apparently claims that more recent development standards, such as revisions to the City's hillside regulations, cannot be applied to construction of homes on this property. These claims are wrong in several ways.

Nothing in the settlement agreement suggests that the City agreed, or the applicant expected, to restrict what regulations would apply to future reconsideration of the subdivision. Surely the applicant would have included such an important detail if that was his intent.

The state law cited for this lock-out effect is in the Subdivision Map Act. After parcel map approval such protection only lasts a few years – certainly not the 12 years that have elapsed. Only a vesting map or a development agreement provides the opportunity for longer regulation freezes, and neither option applies in this case. If the applicant desires the benefits of one provision in the Map Act, he must abide by the limits and restrictions in other parts of the Map Act as well.

The staff reports imply that this lock-out of new regulations applies not only to parcel map approval, but also to construction on the three lots. References have been made to more recent amendments to the City's hillside regulations that cannot apply. This is not correct. The Map Act only limits what local rules apply to the decision whether to approve a subdivision. Actual development remains subject to all newer city rules, policies, standards and restrictions. It is well-accepted that in such situations a subdivision approval may give the property owner the

right to sell, lease or finance separate parcels but then be subject to severe restrictions on what actually can be built on each lot. This is true even when a final map has been recorded. Again, only a vesting map or development agreement can protect against this result, and neither applies in this case.

Mr. Barsell may argue that the particular circumstances of his situation, involving prior litigation and a purported settlement agreement, give him some special privilege. In that regard we point out the court's decision in *Palmer v. Board of Supervisors* (1983) 145 Cal.App.3d 779, where a subdivision had been improperly denied and the court ordered approval of the map but in the meantime new zoning regulations affecting the property had been adopted. The court ruled that those regulations applied despite the earlier improper denial, and the applicant would have to comply with the County's condition of approval requiring rezoning approval. There is no common law vested rights protection from later-adopted regulations in this case.

One example of the potential harm that may arise from this mistaken belief that regulations are frozen involves drainage. During the Planning Commission's December 7, 2006 hearing Mr. Peter Mundy, a consultant representing the Gong and Ent families (other neighbors of the property), called for a new hydrologic study of runoff based on current standards. He pointed out that according to the staff report only 1987 standards were used for project review because of the alleged deemed complete application (minutes page 8, line 14). This suggests serious deficiencies in project review involving drainage and possibly other critical topics.

If the City continues to insist that it must abide by some ancient lock-out of regulations, the date to use should not be 1987. According to the settlement agreement, after MS504-87 was denied it was refiled as MS504-87II sometime in late 1988 or early 1989. It is that application that triggered the litigation and settlement, and it is that map that was reconsidered in 1994. Moreover, even that map was revised to reflect an interim parcel split (MS503-90), whose application apparently was filed in 1989 or 1990 – and which should have served to reopen any regulation lock-out period. In this regard, it is significant that in the settlement agreement the City agreed to reconsider its 1992 denial of the hybrid map – not its original 1989 denial of MS504-87. These questions should be investigated to clarify which date might apply if the City still agrees to be bound by such a restriction.

✓ 6. **Any rights from 1994 approval have expired.** Even when regulations do not set a specific expiration date, an approval may be declared expired for lack of action by the applicant. In *Lakeview Dev. Corp. v. City of South Lake Tahoe* (9th Cir. 1990) 915 F.2d 1290, the court ruled that a developer who built phase one of a project but then waited 12 years before trying to build phase two had no vested rights claim under the original approvals or the work done earlier. The court specifically noted that "such a permanent vesting is the evil that the *Avco* court said that it would not tolerate" (citing the California Supreme Court's seminal decision on vested rights).

The planning files contain no communications from the applicant between 1995 and 2004. For 10 years there was no sign that Mr. Barsell was taking action to comply with the conditions attached to the 1994 preliminary approval, or that he desired to finalize the parcel

map. Absent a negotiated development agreement, no state law permits or condones keeping an interim approval active indefinitely. The governing principle in land use law is that cities must be allowed to adjust their regulations to reflect changing circumstances and priorities, and property owners must be subject to those changes unless they have gained protection under very specific and limited circumstances – none of which apply here.

7. **EIR and applicant ignores evidence of deep landslides.** As Mr. Seidelman points out, careful examination of aerial photographs indicates there may be deep-seated landslides under the property. The only way to confirm this critical detail is by performing deep borings or down hole logs. If he is correct, this might render portions of the site unbuildable or require drastically different mitigation – including much more grading than recognized so far.

The Planning Commission dismissed Mr. Seidelman's claim and my clients' concern by stating that the geotechnical review by the applicant's consultant had been peer reviewed. In fact, only the original 1988 EIR was reviewed by the City's consultant (Alan Kropp); the updated 2006 geotechnical report was never independently verified. Furthermore, neither the applicant's consultant nor the City's expert ever actually studied aerial photographs of the property – they only relied on older studies of the larger region which used aerials.

Mr. Seidelman advises the City not to rely only on his interpretation of conditions. He invites a qualified engineering geologist with suitable experience to examine the photographs. He is confident they will reach the same conclusion – that deep borings or down hole logs are needed to determine actual subsurface conditions and then identify needed mitigations. There can be no legitimate reason to object to this effort. Again, the short time needed does not impose an unreasonable burden on the applicant and is more than justified by the risk to public safety if the situation is ignored. 2-40

In this regard, staff's proposed conditions regarding geotechnical investigation (41 and 42 in the February 1 version) do not call for deep borings, but only deal with mitigating the shallow slides that already have been identified. We note that the Planning Commission apparently added a new condition calling for Alan Kropp or another consultant to review all reports and testimony – but only after parcel map approval, as a condition to the final map. Common sense requires that critical examination of the deep landslide question occur before the parcel map is approved, so the City may order deep borings or down hole logs and then consider the parcel map with a full understanding of the site's problems and mitigation needs.

Ignoring this issue would violate CEQA. We recognize it can be appropriate to delay technical finetuning of grading and geotechnical work until after a tentative map is approved, as more detailed site design and engineering plans are prepared. However, CEQA requires at least a basic understanding of the subsurface conditions and needed mitigations, so the City Council and members of the public fully appreciate the environmental risks involved and the full extent of grading or other work needed to ensure public safety if the map is approved.

If Mr. Seidelman is correct and there are deep landslides or other conditions that have not yet been identified, but the City ignores our concern, there are two possible outcomes – neither

of which are acceptable. The City never discovers these subsurface conditions and construction is allowed without adequate mitigation, but then a disaster occurs affecting new residents and their neighbors – which is a risk my clients cannot accept. Alternatively, studies are done after map approval that confirm our fears, after which the City and applicant privately work out design changes and new mitigation without an opportunity for public review – which violates CEQA. We urge the Council to avoid both scenarios by ordering independent review of the aerial photographs now, followed by whatever additional borings and studies are found to be needed. Then the project can be redesigned and new mitigations proposed as needed, and the results can be circulated for public review before considering subdivision approval.

8. **EIR was never certified and is still open to legal challenge.** City staff seems to believe that the 1988 EIR must be accepted as legally adequate and cannot be challenged in court. This is not correct. If the City approves this subdivision based on that EIR and the new Addendum, without fully investigating the question of deep landslides and other matters in dispute, the neighbors will have the right to litigate the adequacy of both documents. 2-41

While the Planning Commission did certify the EIR in 1988, the City Council denied the subdivision applications in 1989 and again in 1992. Consequently there was no approval for the neighbors to litigate, and so no opportunity to challenge the original EIR. An EIR certification in a vacuum has no legal significance: lawsuits are not filed to question an EIR, but rather to challenge a project approval based on the adequacy of the EIR. (See *Public Resources Code §21167.*) Thus, the time to file suit does not begin until some agency action is taken approving a project, or when the agency posts a CEQA notice of determination announcing that there has been an approval action relying on an EIR. To our knowledge this has not yet occurred regarding the 1988 EIR or subdivision of the Barsell property. Nothing in the files suggest that the 1994 vote to preliminarily approve the map incorporated reliance on the EIR. Thus the 1988 EIR remains open to challenge.

Furthermore, EIR certification must be tied to final consideration of some discretionary approval. Even though CEQA provides a defined procedure for circulating draft EIRs for public review, the law also recognizes that members of the public are free to submit comments even after the Final EIR has been prepared, up to the very last public hearing on the project application, and the public agency should consider even last-minute criticisms of the EIR or face the risk of a rebuke by the courts. The Lafayette Planning Commission voted to certify the EIR in October 1988 as part of considering the Barsell subdivision application. However, that supposed certification had no legal significance but only served as a recommendation, as the final decision on the subdivision was up to the City Council. When the Council voted to deny the subdivision in June 1989, it also was negating the Commission's prior action on the EIR as there was no approval relying on the EIR to be challenged.

The 1988 EIR has never been formally certified, and it has no legal status protecting it from scrutiny and challenge. All we have is a 19-year-old document based on outdated traffic and other data and incomplete geotechnical information, plus an "Addendum EIR" addressing some but not all topics covered in the EIR. Since there is no certified EIR to rely on, the City is

wrong to use CEQA regulations regarding when a subsequent EIR should be prepared to support only preparing an addendum now. Every part of the old EIR is open to scrutiny and must be verified as adequate under current conditions, based on current regulations, environmental standards and available data.

What makes this question particularly disturbing is that the Planning Commission was misled by staff as to how much discretion they had to alter mitigation measures. Minutes from the Commission's December 7, 2006 hearing read as follows (page 4, line 13):

> Ms. Sinette reported the City Attorney did not see a problem in slightly changing some of the language into firmer mitigation measures. But since they were adopted in the final EIR, there wasn't a lot of latitude in changing them.

We have no way of knowing how the Commission might have acted if it understood that in fact it could reconsider and revise mitigation measures, as well as require additional study.

9. **Council cannot make the findings required to approve the project.** In order to approve the subdivision, the City Council must adopt certain findings. Those findings must be supported by credible evidence in the formal record. Without definitive investigations regarding deep landslides, the Council cannot make the finding that the project is not likely to cause serious public health problems and will not be detrimental to the safety of the neighbors.

10. **CEQA documentation required for an approval is missing.** The staff report to the Planning Commission did not include any of the CEQA findings and support information required to approve a project. If they are just now being provided to the Council in its packet, then the March 12 hearing must be continued to allow the public time to obtain and review that material. We also have not seen a copy of the CEQA Mitigation Monitoring and Reporting Program, though it is mentioned in draft condition of approval no.4; that too must be available for public review before Council action.

11. **Staff can't explain purpose of a condition that sounds important.** Draft condition of approval no. 23 reads:

> Prior to Final Map approval, the applicant shall provide proof to the City that condition of approval #4 as shown on the conditions of approval for Subdivision 6462 dedicating development rights over Parcel A to Contra Costa County has been rescinded or otherwise modified allowing development of Parcel A for access to the subject property.

This condition is very perplexing and disturbing. It indicates that at some time in the past the County had good reason to restrict development on this property. And now the City is simply telling the applicant to fix it – apparently without any City input as to how it is fixed or what important effects might result. Surprisingly, the planning files contain no information about this County condition. Even more surprisingly, city planners staff apparently don't know what is involved either. Senior Planner Christine Sinnette told me that a planner in Orinda mentioned

the restriction and Lafayette staff simply inserted the condition without any investigation. How can the public – or the Council – comment on the appropriateness of this condition and the wisdom of its removal while lacking any idea of what is involved? How can the City give the applicant carte blanche to negotiate its removal or modification – whatever the consequences to nearby residents or the community – without any oversight by the City? This is unacceptable.

We have not yet been able to review minutes from the Commission's February 1 hearing to identify other grounds for objection. We also have not obtained the staff report to the Council for the March 12 hearing, which may contain other details warranting comment. These provide additional reasons to postpone the hearing and allow the public time to review these critical background materials.

Thank you for your consideration of these questions.

Very truly yours,

ARCHER NORRIS

Edward L. Shaffer

ELS/oev
encl.

cc: (all via email)

City: Mala Subramanian, City Attorney
Steven Falk, City Manager
Joanne Robbins, City Clerk
Christine Sinette, Senior Planner

Clients: Peter and Susan Colby
Peter and Martha Clark
Walter and Virginia Price
Steven and Rochelle Klein
Tim Johansen and Mary Hartfield

C0292001/547990-2

Response to Comment #2: Archer-Norris/Edward Shaffer, May 9, 2008

2-1 The City has retained Alan Kropp & Associates to provide independent professional geotechnical and engineering geological evaluation of project impacts. AKA provided geotechnical input on behalf of the City during preparation of the 1988 EIR. AKA is a 30-year old geotechnical consulting firm specializing in geotechnical investigations and geo-hazards assessment. Mr. Kropp is recognized for his contributions in earthquake hazard research.

2-2 Refer to Master Response 9.5.1. and Response to Comment 1-7. The Planning Commission certified the EIR, but denied the project. On appeal, the City Council upheld the Planning Commission's denial of the project and left intact the EIR certification. Please note, however, that the 1988 EIR was included in the SEIR as an appendix to ensure that the public and public agencies had a full opportunity to comment both on the current project and the entirety of the environmental analysis.

2-3 A detailed review of the trench excavation and exploratory borings is discussed in the Section 3.2.3 of the Draft SEIR. Also see Master Response 9.5.3a and Response 1-4.

2-4 See Response 1-5. The parameters used in the slope stability analysis were reviewed by AKA and found to be appropriate for the site conditions (see Appendix D-6 of the Draft SEIR).

2-5 See Master Response 9.5.3b.

2-6 Contrary to Mr. Seidelman's ascertain that only one boring was complete in the landslide, over 20 borings and test pits were drilled and excavated to define the lateral and vertical limits of the landslide feature in question. This number of point excavations is sufficient to characterize the limits of the landslide. Also see Master Response 9.5.3a.

2-7 See Master Response 9.5.3b.

2-8 See Response 1-5. Additionally, the City has the discretion to rely on the methodology suggested by its experts. A disagreement among experts as to methodology is not an indication of the EIR's adequacy. (State CEQA Guidelines, § 15151.)

2-9 The symmetry of the slide used in the slope stability analyses was determined based on the information obtained from the two rotary wash borings and eight test pit excavations completed in July 2007 and the five geotechnical borings and six test pits done in 1987 and 2006. This level of data was determined by AKA to be appropriate for this stage of the project. Given the amount of actual data used to inform the

analyses, the analyses are far more reliable than a "guess" as the comment implies. See Appendix D-6. Also see Master Response 9.5.3a.

2-10 See Master Response 9.5.3a and Response 2-9. Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features. See Chapter 10.

2-11 This April 2007 comment is outdated and the issues raised therein have already been addressed. See Master Response 9.5.3a, and Response 1-4.

2-12 This April 2007 comment is outdated and the issues raised therein have already been addressed. See Master Response 9.5.3a, Response 1-4, and Response 2-9.

2-13 This April 2007 comment is outdated and the issues raised therein have already been addressed. See Master Response 9.5.3a, Response 1-4, and Response 2-9. Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features. See Chapter 10.

2-14 See Master Response 9.5.3a and Response 2-9. The project description has been revised to clarify that the on-site portion of the landslide complex at the parcel B/C lot line will be excavated west of the access road to the extent necessary for the buttress fill to stabilize the road and that all of the on-site landslide complex east of the road will be repaired. The landslide will be remediated and is therefore not a design consideration for any house or accessory structures proposed for Parcel C.

2-15 See Master Response 9.5.3a. The remedial work will address geotechnical issues on the project site to facilitate development of the home sites described as part of the project. The City cannot legally require the project proponent to remediate conditions on land that the proponent does not control and that would not be affected by the project. Because remedial work beyond the project boundary is not necessary, the remedial plans do not address the extent of landslides that do not occur on the property.

A portion of the identified homesite for Parcel C is impacted by the landslide. The project description has been revised to clarify that the on-site portion of the landslide at the parcel B/C lot line will be excavated west of the road to the extent necessary for the buttress fill to stabilize the road and that all of the landslide complex east of the road will be repaired. The landslide will be remediated and is therefore not a design consideration for any house or accessory structures proposed for Parcel C. Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features (see Chapter 10).

2-16 This comment questions the adequacy of the subsurface geotechnical investigations conducted for the 1988 FEIR and the updated 2006 studies. This comment was originally submitted in April 2007 and is no longer relevant because new subsurface investigations have been conducted that adequately identify landslides and unstable

soils potentially affecting the project or affected by the project. See Master Response 9.5.3a.

2-17 This comment refers to outdated information. See Master Response 9.5.3a for updated studies and analyses.

2-18 This comment is outdated. Based on soil test pit review by AKA, AKA concluded that a landslide feature is not likely present on Parcel A (see Draft SEIR, p. 50, par. 1).

2-19 This comment questions the level and scope of remedial repair necessary to mitigate landslide effects. This comment was originally submitted in March 2007 and is outdated. The level and scope of remedial repair necessary to mitigate landslide effects are addressed in the Draft SEIR on pages 52-55.

2-20 This comment questions the feasibility and the level and scope of remedial repair necessary to mitigate landslide effects. This comment was originally submitted in March 2007 and is outdated. The feasibility, level and scope of remedial repair necessary to mitigate landslide effects are addressed in the Draft SEIR on pages 52-55. Potential impacts from project construction including remedial repair are discussed in the Air Quality and Noise sections of Chapter 3 (Draft SEIR, pp. 77-80).

2-21 The comment suggests reconfiguring homesites to avoid the remedial geotechnical work described in the SEIR. Remedial work will occur on parcels B and C; the proposed homesite on Parcel A is not impacted by the remedial work (see Draft SEIR p. 50, p. 1 and Figure 4-C). Please note that the SEIR concluded that all impacts related to the remedial earthwork would be less than significant. Moreover, the SEIR included analysis of an alternative that would accomplish the same goal. Neither that alternative nor the suggestion in this comment would satisfy one of the key objectives of the project: "Provide for a secluded, private single-family home with limited off-site view impacts on Parcel C." The suggestion in this comment would in fact place the home site on or immediately north of the bedrock ridges, which would be visible off-site from Happy Valley Road. Therefore, this suggested homesite location is not feasible.

2-22 This January 2007 comment is now outdated. See Master Response 9.5.3a for information on additional subsurface investigation.

2-23 See Master Response 9.5.1. The EIR was certified in 1988 as described in various city documents.

2-24 This comment from April 2007 focuses on the CEQA process followed by the City. At that time, an Addendum to the 1988 FEIR was being prepared. It was later determined by the City that a supplement to the 1988 FEIR should be prepared. The City has followed proper CEQA procedure including distribution of a Notice of Preparation (see Appendix A, Draft SEIR), distribution of a Notice of Availability,

and published legal ads and notices to the public about hearings before the Planning Commission and City Council. The Draft SEIR was sent to the State Clearinghouse for distribution to public agencies including the Department of Fish and Game, Regional Water Quality Control Board, Native American Heritage Commission, Caltrans, and the Department of Parks and Recreation. The CEQA process and the City's compliance with it are discussed in Section 1.2 of the Draft SEIR and this Chapter 9. Also see Response 1-1.

2-25 An initial study based on the current project was completed in February 2008 identifying potential impacts of the project and their level of significance. A complete copy of the initial study is included in Appendix A of the Draft SEIR. Contrary to the comment, the City's Initial Study did comply with the requirements of CEQA by providing the required "brief" overview of the project and its potential impacts. (State CEQA Guidelines section 15063(d).) In any event, a lead agency need not even prepare an initial study where, as here, an Environmental Impact Report is being prepared. (State CEQA Guidelines sections 15060(d), 16053(a).)

2-26 The commenter states that the cumulative impact analysis in the 1988 EIR is outdated. Since that time, the City adopted it General Plan and certified its General Plan EIR. The General Plan EIR analyzed the cumulative impacts of growth and development throughout the City. The project is consistent with the General Plan and its growth projections. Therefore, pursuant to section 21083.3 of the Public Resources Code, that cumulative impacts analysis need not be repeated in the SEIR. In light of that section and the General Plan EIR, cumulative impacts of the current project are discussed in Section 4.2 of the Draft SEIR.

2-27 This comment claims that the then proposed addendum would be inadequate. The comment incorrectly states that the 1988 EIR was never certified. Please see Master Response 9.5.1. for a detailed history of that EIR's certification. Because the 1988 EIR was certified, the standards in Public Resources Code section 21166 apply to any subsequent environmental review. Please refer to Master Response 9.5.2. for an explanation of the use of a supplement to an EIR.

2-28 This April 2007 comment states that the risk of deep landslides has been ignored and that the applicant's geotechnical studies have not been peer reviewed. This comment is outdated as the issue of landslide identification and peer review of the applicant's studies are addressed in Section 3.2.3 of Draft SEIR further discussed in Master Response 9.5.3a and Response 2-2.

2-29 The storm drainage and runoff section of the FEIR has been updated in Section 3.2.4 of the Draft SEIR (pp. 59-65) and discusses the impacts from the current project which includes an on-site stormwater control system. Although not necessary at this stage of tentative map review, the applicant has submitted a technical memorandum from CDM, the project hydrologist, to supplement the analysis in the Draft SIER (see Appendix L). The memorandum outlines a preliminary design of storm drainage improvements for Parcel C and calculates the 10-year flows for both existing and

proposed conditions. In preparing this design, three conditions were considered: (1) pollutant removal from runoff, (2) low flow control of runoff and (3) reduction of the 10-year peak flow so it will not exceed existing conditions.

Runoff from impervious surfaces on Parcel C will be collected and conveyed to the vegetated swale. Subsurface flows from the landslide repair areas also will be conveyed to the swale. Pollutants will be removed and waters leaving the swale will flow into the on-site creek. During heavy storms, the low flows will be conveyed to the vegetated swale, and the high flows will be conveyed to the detention basin where they will be detained, and then released at a low rate to the creek. These improvements will result in both low and high flows leaving the site that are less than the existing flows that enter Happy Valley Creek.

2-30 Construction-related impacts are addressed in the Draft SEIR in Section 3.2.3 (p. 53, par. 5), in Section 3.2.4 (pp. 62-65), the Air Quality and Noise sections of Chapter 3 (pp. 77-80) and mitigation measures 11, 16, 17, 18, and 28.

2-31 According to this April 2007 comment, there has been no pubic review of the FEIR or project changes. The SEIR, which includes the 1988 FEIR, has been circulated for public review as required by CEQA and public hearings have been conducted on the SEIR and project. Also see Response 2-24.

2-32 See Master Response 9.5.3b and Response 2-29.

2-33 See Master Response 9.5.3a.

2-34 The comment suggests that the 1988 EIR did not analyze alternatives that would avoid the need for remedial earth work. Please note that the SEIR concluded that the impacts of the remedial earth work would be less than significant. The SEIR nevertheless included analysis of an alternative configuration that would avoid such work. See Chapter 5 of the Draft SEIR.

2-35 This April 2007 comment is outdated and the concerns expressed therein have been addressed. See Draft SEIR, Section 1.2 and Section 2.5.

2-36 This April 2007 comment refers to the FEIR and notes discussions on alterations to existing creeks and drainage channels. As discussed in the Draft SEIR in sections 2.5, 3.2.4 (p. 63, par. 4 and 5) and 3.2.5 (p. 71, par. 3), the current project proposes no alterations to existing creeks and drainage channels except for a possible storm drain outfall to the creek on Parcel C. Pursuant to mitigation measure 22, the on-site drainage plan shall be reviewed by the California Department of Fish and Game to determine if a Streambed Alteration Agreement is required. The SEIR was distributed to DFG and other state agencies; however, the City has received no comments from such agencies. The City may therefore presume that they have no comment to make on the project or the analysis in the SEIR. (State CEQA Guidelines section 15207.)

2-37 Visits to the project site were conducted by Beeman & Associates, Biological Consultants, and a series of reports prepared. (See Section 3.2.5 of the Draft SEIR (pp. 65-67, and Appendix E-1, E-2, and E-3. In response to this comment, Beeman & Associates has submitted an additional letter which is included as Appendix H. Notably, Gary Beeman is recognized by the Department of Fish and Game as having expertise in working with amphibians and reptiles of California. (Department of Fish and Game, "A List of Individuals with Expertise in Working with the Amphibians and Reptiles of California," *Inland Fisheries – Informational Leaflet No. 43.*)

2-38 This comment is a letter rebutting statements made by the applicant's representative and provides no comment on the SEIR, as the comment was submitted prior to release of the SEIR. All concerns raised in this comment were addressed in the SEIR. Also see Master Response 9.5.3a.

2-39 See Master Response 9.5.1 regarding certification of the 1988 EIR and Master Response 9.5.2. which explains the standards that govern subsequent environmental review. All other concerns raised by the commenter have been addressed either in the Draft SEIR or in these responses to comments.

2-40 This comment from March 2007 states that the City, applicant, and EIR ignore evidence of deep landslides. New subsurface investigations have been conducted that adequately identify landslides and unstable soils potentially affecting the project or affected by the project. See Section 3.2.3 of the Draft SEIR. Also see Master Response 9.5.3a and responses 2-16, 2-19, 2-20, and 2-28.

2-41 See Master Response 9.5.1. regarding certification of the 1988 EIR.

Comment #3

Sinnette, Christine

From:	wcp94111@yahoo.com
Sent:	Friday, June 20, 2008 5:27 PM
To:	Sinnette, Christine
Cc:	paul seidelman; ed shaffer
Subject:	Fw: Leamy Planning Commission Hearing

RECEIVED
JUN 2 0 2008
CITY OF LAFAYETTE
PLANNING DEPT.

Dear Planning Commission,

I think I heard the conclusion last night that you would address all issues raised at the meeting and in written comments, like that attached, in your recommendation to the City Council. I heard a lot of discussion about the major slide last night and I am satisfied that the issue has been raised. Of course, I disagree with the conclusion that we should trust the process going forward to delineate the slide and remediate it properly and deal with the potential damages to our houses and property. It seems that this work should be done ahead of time and Mr. Leamy should agree to indemnify the down hill neighbors for any resulting damages in writing before this project is approved.

I heard no discussion about the water diversion issue I raised in my letter and I plan to raise it before the City Council as soon as I am able to gather supporting documentation from my engineering consultant about the risk to the unstable bank on my property. As you can guess, I had almost no time to read the document before the meeting and wasn't sure I had read the engineering drawing correctly. After talking with Mr. Seidelman and Mr. Wolf last night after the meeting, I am more assured that the issue I raised is a serious one.

Please email me back with assurance that you have received this and my previous email.

Sincerely,

Walter Price

--- On Tue, 6/17/08, wcp94111@yahoo.com <wcp94111@yahoo.com> wrote:

> From: wcp94111@yahoo.com <wcp94111@yahoo.com>
> Subject: Leamy Planning Commission Hearing
> To: csinnette@lovelafayette.org
> Date: Tuesday, June 17, 2008, 1:25 AM
> June 17, 2008
> Dear Planning Commission,
>
> I wish to respond to the Leamy documentation that I was just alerted
> to and have read. I have two major objections and one request.
>
> First, the slide that a geologist that the neighbors retained and at
> least one other at Cal Geology has identified is not shown on the
> revised plan and is not discussed. I have recently walked the
> property at Mr Leamy's invitation and I would suggest that each of the
> Planning Commissioners also do so. It is quite obvious to anyone who
> has ever seen a snow avalanche or even seen pictures of such a
> formation that what is present on the property is a massive "earth
> avalanche". You can easy see it in the afternoon when the sun hits
> the top of the ridge, the sharp break of the land, the steep angle of
> descent where the earth is gone, and the pile of debris that extends
> through a neighbor's lot into lots B and C and into Tim Johansen's
> property.

1

> It is also obvious why this slide has been excluded from
> discussion: it is massive, complicated, and will cost a lot of money
> to fix properly. Any proper planning document must discuss this 3-1
> slide. Everyone knows it exists, and the neighbors who are below it
> are determined that it must be fixed as part of any development.
>
> The second issue that I have is there seems to be a large drainage
> canal that will route much of the water from the site into the creek
> at the border of my property. The area for this water is already
> steeply eroded and the bank is unstable. Introducing much higher
> water flows into this area could cause the bank to give way,
> jeopardizing my pool house, the Johansen's property, and Soares lane,
> which the creek runs under. My neighbor on Happy Valley Road has 3-2
> already corresponded with the Planning Commission complaining about
> the water flow which is endangering his house. I don't believe he has
> even been noticed on this matter. At the present time, the water
> soaks into the hill, and then runs off all along the property,
> sometimes overwhelming the drainage systems of the Kleins, Clarks, and
> Johansens. The idea that this new canal is being introduced to route
> most of the water into a new direction without detailed study or
> discussion is also a flaw in the plan.
>
> Finally, there has been a lot of discussion whether there was illegal
> grading done on the property by Mr Barsell, and many of the neighbors,
> including myself, have testified that this was done. We have been
> unable to find the photographs of this work, but we now have
> interesting before photos of the property with a robust 100-200 year 3-3
> old oak tree on it in 2005 on page 39 of the submission. This tree is
> now dead, and covering the roots of such a tree with dirt is a sure
> way to kill it. I was certainly sad and upset when I walked by this
> stark monument. Apparently, there was no attempt made to save this
> tree, which conveniently has some of the most beautiful views of Mt.
> Diablo in Lafayette. I would request that the Planning Commission
> authorize that a tree specialist examine this tree for cause of death
> to help settle the dispute as to whether illegal grading was done.
>
> Sincerely,
>
> Walt Price
> 4115 Happy Valley Rd.

Comment #3 Walter Price, June 17 and June 20, 2008

3-1 The commenter states that a landslide near parcels B and C has been excluded. As discussed in Section 3.2.3 of the Draft SEIR (p. 50, par. 5 and 6) and as shown in revised figures 4-A and 4-B, and Figure 5, a landslide has been identified and mapped near parcels B and C.

3-2 The project civil engineer Schell & Martin has submitted a letter in response to this comment (See Appendix I). Additionally, there will be no change in that portion of the watershed draining from Parcel B toward Happy Valley Creek. Storm drainage improvements in Parcel C will be made so that there will be insignificant changes to flow conditions in Happy Valley Creek. There is an existing grade control structure in Happy Valley Creek at the boundary of Parcel C and this structure will not be changed. The stability of the creek bank will not be diminished. Also see Response 2-29 and Appendix L.

3-3 This comment questions why an on-site oak tree is now dead and if the death was caused by grading activities. As stated in Section 3.2.5 of the Draft SEIR (p. 68, par. 6), a valley oak identified as #123 on Figure 8 is dead. A supplemental report prepared by Chris Kukula, Certified Arborist, notes that the tree most likely died of natural causes. See Appendix J for the report.

Comment #4

Sinnette, Christine

From: wcp94111@yahoo.com
Sent: Wednesday, July 02, 2008 12:41 AM
To: Sinnette, Christine
Cc: paul seidelman; ed shaffer; peter colby
Subject: Re: Leamy Planning Commission Hearing

Dear Planning Commission,

I will be unable to attend the Thursday meeting, but I wanted to comment that I find your version of an Environmental Impact Report to be illogical. The whole concept of that process, which has not been adhered to, is that the environmental impacts of a project are as fully understood as practical and the mitigation is developed and agreed upon ahead of time and in a way to minimize the Impact on neighbors. The idea that you can approve this project before the down hole logging is done and the extent of the slide is as fully understood as reasonable is something I can not understand. Mr Kropp testified that the science of logging is quite advanced and doing it would allow a working plan to be developed. Instead you want us to agree to approve the project before that exploratory work is done and trust that the combined efforts of the City engineer and his consultants will protect us as the slide is openned up. We are left with no alternative but to wait for our houses to settle, our banks to erode, our roads to fail, and then to sue for our damages. Who is responsible for the trauma we could endure? 4-1

Mr Leamy stands to realize over $10 million in profits on this subdivision after Parcel B is split up. Why would you not require him to do the logging, develop a completed plan for slide repair and drainage, and allow us with Mr. Seidelman to agree that the plan is reasonable before the project is approved and started? That seems what the whole planning process is about. This would not cost much in relation to the total scope of the project and would make everyone feel better about the process and outcome.

Sincerely,

Walt Price
4115 Happy Valley Road

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Response to Comment #4: Walter Price, July 2, 2008

4-1 See Master Responses 9.5.3a and 9.5.3b. According to the minutes of the June 19, 2008 Planning Commission minutes, Alan Kropp responded as follows when asked by a Planning Commissioner if the extent of the study before them is typical for other projects at the tentative map stage, "Historically this has been the type of approach that would be taken for a project. He said we are in a transition phase. Downhole logging has been shown to be effective enough that it is becoming more common even at the tentative map stage, but it is still rare in his experience." The current level of geotechnical studies and evaluation has been determined by AKA to be appropriate for this stage of the project. See Appendix D-6 of Draft SEIR.

Comment #5

City of Lafayette
Planning Commission Meeting

MINUTES

Thursday June 19, 2008, 7:00PM
Lafayette Community Center, 500 St. Mary's Road, Manzanita Room

CALL TO ORDER
Vice Chair Lovitt called the meeting to order at 7:05p.m.

ROLL CALL
Present: Vice Chair Lovitt; Commissioner Chastain; Commissioner Holt; Commissioner Curtin-Tinley; Commissioner Humann

Absent: Chair Mitchell; Commissioner Ateljevich

Staff: Christine Sinnette, Senior Planner; Malathy Subramanian, City Attorney; Niroop Srivatsa, Planning Director; Greg Wolff, Senior Planner

ADOPTION OF AGENDA
Commissioner Holt moved to adopt the agenda. Commissioner Humann seconded the motion which carried (5-0-0).

PUBLIC COMMENTS
Vice Chair Lovitt opened the public comment period. There were none.

NEW PUBLIC HEARINGS
MS504-87CCII – ROBIN AND KRIS LEAMY (APPLICANTS & OWNERS), R-40 ZONING: Request for a minor subdivision to divide 19.23 acres into three lots for residential development pursuant to Chapter 6-20 and Chapter 6-30 of the Lafayette Municipal Code, located at 4123 Happy Valley Road, APN 247-010-019 and 020. CONSIDERATION OF THE DRAFT SUPPLEMENT TO AN ENVIRONMENTAL IMPACT REPORT (SEIR).
Recommendation: Consider the matter, take public testimony, and forward recommendation to the City Council to adopt the Draft SEIR.
Project Planner: Christine Sinnette, Tel. (925) 299-3241, csinnette@lovelafayette.org
(Estimated time: 90 min*)
Christine Sinnette gave a verbal staff report stating that the Minor Subdivision was originally proposed in 1987. The application was re-activated as a 3-lot subdivision by new property owners in 2005. In 2006 and 2007, the Planning Commission and City Council considered the 3-lot subdivision. When the application was re-activated, staff decided that an addendum to an EIR certified in 1988 should be prepared to update the baseline studies. The Planning Commission reviewed the Addendum EIR and draft conditions of approval. The Commission had no specific comments on the Addendum EIR and requested some revisions to the conditions of approval and forwarded them to the City Council for their approval.

She noted that before the City Council meeting in April 2007, it was decided that because of concern over geotechnical issues a peer review of the geotechnical reports and comment letters from the public should be conducted. The City contracted with Alan Kropp & Associates, Inc., geotechnical engineers. Based on this peer-review and supplemental geotechnical studies, it was discovered that a previously identified landslide encompassed a larger area than originally thought. This landslide had the potential to impact the access road to Parcel C.

Ms. Sinnette indicated the current project now includes the complete repair of two on-site landslides and a swale containing a complex of landslide debris and colluvial deposits, provision of an on-site stormwater drainage system, and expanded trail easement dedication.

She said the current project is less dense than the one analyzed in the 1988 EIR and has been determined by the City to be consistent with the Final EIR. However, since new geotechnical information has now become available, the addendum EIR has been replaced by a supplemental EIR (SEIR).

Ms. Sinnette stated the SEIR evaluates the potential impacts associated with the current plan and updated baseline reports and identifies the additions or changes necessary to make the previous EIR adequately apply to the current plan. For each of the environmental issues analyzed in the SEIR, the environmental setting, thresholds of significance, impact analysis, and mitigation measures are discussed.

She noted that the final EIR was used as a basis for information about the setting of the project site and surrounding area, and for thresholds for determining impact significance. Except for the sections on geology, biological resources and noise, and those sections required by CEQA to be included in an EIR, most of the analyses, conclusions and mitigation measures are the same ones the Planning Commission reviewed as part of the former addendum.

Ms. Sinnette stated that in addition to considering the project as currently proposed, the Planning Commission should focus its review on the SEIR and the conditions of approval. Review of the SEIR should focus on its sufficiency regarding identification of environmental impacts and methods to avoid or mitigate those impacts and supplementation of the FEIR. Adequacy should be considered in terms of what is reasonable in light of factors such as magnitude of the project, the severity of its likely environmental impacts, and geographic scope of the project. CEQA does not require that conclusive or exhaustive tests or studies be performed for EIRs.

She noted that there continues to be disagreement among experts particularly about geotechnical impacts but such disagreement does not make an EIR inadequate. This SEIR presents all relevant information, summarizes the main points of disagreement among the experts, and reaches a conclusion regarding significance and mitigation. Staff and the City's consultants believe that the level of studies and detail provided in the project description, plans, reports, and SEIR are adequate for this stage of a tentative 3-lot subdivision. The applicants will be required to mitigate the potential impacts of project development but are not required or obligated to mitigate existing conditions or impacts not a result of the project.

She concluded by saying the Planning Commission should also review the draft conditions of approval. The conditions have been amended to address the revisions previously requested by the Commission. If those conditions have now been revised, they are shown in strikeout or underline text. The SEIR includes mitigation measures from the Final EIR and revised or new mitigation measures. The mitigation measures included in the conditions of approval do not show strikeout or underline text unless they are new mitigation measures and therefore new conditions.

Commissioner Holt referred to the letter from Mr. Price and the attorney representing some of the neighbors placed on the dais and asked for comments from staff.

Ms. Sinnette noted that the letter from Walter Price contains three major points. She said it primarily discusses the geotechnical issues and that staff and consultants, Alan Kropp and Associates, believe the geotechnical issues have been fully addressed for this stage of development. She said there will be remedial work done on the two landslides as well as the additional swale. She said there are some preliminary plans for remedial earthwork in the EIR so staff and the consultant believe it has been adequately addressed. She noted there has been a preliminary plan provided for drainage as well. She indicated there is a response letter to Mr. Price's letter prepared by the project Civil Engineer Schell & Martin which goes into more detail about the drainage plan. She said it is primarily meant to capture any drainage from impervious surfacing from the new development. She stated there is a question about a valley oak on the property which was reviewed by the project arborist back in 2005. Ms. Sinnette stated that the arborist determined that the tree was in poor health; it had appeared to have been damaged in a storm and had lost a major limb. Ms. Sinnette stated that she recalled going out to the property because of concern that the tree was being removed; however it was just the limb that was being removed. The project arborist has prepared a response that the death and/or damaged caused to the Valley Oak is from natural causes. She referred to the other letter and noted she was going to have the City Attorney look at it; which would have to be delayed until the attorney returned.

David Bowie, spoke as an attorney on behalf of applicants Robin and Kris Leamy. Mr. Bowie thanked staff for the extensive work done on the project. He stated it was an extraordinary effort and that he and the applicant

are very grateful. Mr. Bowie stated that he had a chance to review the letter from the neighbor's attorney who is in opposition of this project. He said the letter made three points; the first is titled "Why the Rush?" the second is "Don't talk about the project" and the third is "The 1988 EIR was never certified". Mr. Bowie stated he would address each point and said he was before the Commission in 1988 and recalled seeing several of the Commissioners who were present tonight. He stated the project has not been rushed. He noted that when the project was reactivated in 2005 by the Leamy's, work was done and hearings have been held every year since then. He reiterated that this has not been a rushed project. He reminded the Commission that this is a three-lot subdivision proposed for something over 18.2 acres in an R-40 zoning district. He stated the applicant could pursue much higher density than what is currently proposed. Mr. Bowie stated he would come back to the second point.

Mr. Bowie recalled the third point was that the 1988 EIR was never certified. He stated that this is not true and that to some extent it is probably irrelevant, but the City records indicate the EIR was certified in 1988. He said that it is true that the project was not approved by City Council after that certification was completed because it ended up going to court and then it went through judicial review and after the passage of some years it was approved for reconsideration so a notice of determination wasn't published at that time the statute of limitations for 30 days didn't run. He reiterated that the EIR was certified and now there is a supplemental EIR which is designed to address additional conditions that may have changed within 20 years. He agreed that the supplemental EIR is fair. He noted that the prior certification still stands. He commented that people think that because there was no approval that the EIR is not valid, he said that is not true according to the law. He said that the project was approved preliminarily upon reconsideration by the City Council and no challenge thereafter made.

Mr. Bowie, referred back to the second point made in the letter "Don't talk about the project". Mr. Bowie stated that it is an unusual context and the objection is not relevant. He noted that back in 1992 in a memorandum from Mike Henn, Assistant Planning Director stating that subject application has a long and unusual history. He indicated that there was an official reconsideration of this project by the City Council which was granted and preliminarily approved subject to two conditions. He stated the two conditions had to do with access across Happy Valley Road into this property. He stated that the Council did not want to speak to conditions of approval if the access was not taken care of. He stated that the access now has been taken care of so the Commission is now here to consider conditions to the approval. Mr. Bowie stated that the City Council asked the Planning Commission to provide input but it was a part of a hearing compelled as matter of law. He stated that he has letters from the former City Attorney to back up his last statement. He said this is not technically a legally noticed hearing where limitations in terms of the scope of the notice might make a difference. Mr. Bowie reiterated that the Commission is here to consider the supplemental EIR to see if it is complete based on whatever conditions have been identified and secondly the Commission is to approve conditions to the approval, which has been preliminarily granted, and that input goes to the City Council who will make the final decision.

Mr. Bowie stated that staff has a good point when they stated that the purpose of the supplemental EIR is to evaluate the significant environmental impacts of this particular project. Mr. Bowie stated that the principal concerns the neighbors have had, have been in regard to geotechnical considerations, specifically a deep-seated bedrock landslide. He stated that the landslide is more than adequately described in the supplementals, it has been peer reviewed by Alan Kropp on two occasions, 20 years ago and more recently. Mitch Wolff has also looked at it. Mr. Bowie stated that Mr. Wolff is present to indicate to you that this is more than adequately addressed as part of the overall study. He said that everything has been done that is necessary to assess and determine how to look at geotechnical issues other that the specific design studies which are done at the time construction is about to start. Mr. Bowie indicated that it has been suggested that deep hole boring take place. He stated that the plan is to take out, remove, and repair the landslide so he does not understand what good it will do to do a boring when the entire slide will be exposed and repaired. Mr. Bowie indicated that the landslide is a pre-exiting condition and is irrelevant to the planned development of the property. He stated that since it was already there the project is not causing the environmental impact and on that ground it has more than adequately been addressed. He said the Environmental Impact Report only addresses new issues caused by the development. Mr. Bowie referred to conditions number 37 and 38 referring to design standards that relate to a 10-year and a 100-year storm. He stated that the customary design in Contra Costa County and elsewhere in California is for a 10-year design standard not 100-years. He stated he doesn't know how one would detain 100 years of floodwaters; it has not been the standard and said the 100-year requirement is inaccurate and inapplicable. Mr. Bowie stated that condition number 22 refers to a grant of easement to the City. He said the

applicant has no problem with that but wants to make sure it has been properly addressed. He said the property east or west of Happy Valley Road is subject to Orinda jurisdiction. He said the applicant would be happy to give what south portion of Happy Valley Road they could. Mr. Bowie reserved the remainder of his time for the rebuttal period. He noted there were others present to speak about geotechnical issues.

Vice Chair Lovitt asked if Mr. Bowie wanted the other consultants to make presentations or if he would answer questions now.

Mr. Bowie stated the Commission should pose questions to the consultants rather than having them speak.

Commissioner Holt asked if the easement is dictated on a map.

Mr. Bowie stated that he and the civil engineer can't figure out where it is. He reiterated that the applicant doesn't have a problem granting the City an easement as long as it is legal. He stated he did not want a condition that cannot be fulfilled. He said he knows that much of the and around Happy Valley Road is actually in Orinda's jurisdiction.

Commissioner Curtin-Tinley referred to condition of approval 28 and 29, mitigation measures 2 and 3. She said these conditions speak to getting review and approval by the City of Orinda for certain roadway improvements and installation of signs. She asked if that was different than the encroachment permit that was required.

Mr. Bowie stated that the encroachment permit was obtained and all the requirements were met. He said Mr. DeLeuw, the traffic engineer for the City, had additional suggestions such as signing and central line marking which the City of Orinda had not required. Mr. Bowie stated that the applicant is happy to do that but technically because it is within Orinda's jurisdiction, they would need to get approval from them.

Commissioner Curtin-Tinley asked if Mr. Bowie anticipates an issue with the City of Orinda approving it.

Mr. Bowie stated he did not see an issue since it is safety-oriented.

Commissioner Curtin-Tinley asked the applicant to identify where the landslides are located and how they relate to proposed building sites.

Mitch Wolfe with Cal Engineering, the applicants' geotechnical engineer, showed the Commission on the map by coloring it in where the landslides are located. He stated that on the access road off of Happy Valley Road there is a landslide below the road. He said several test pits were excavated in this area to determine the landslide's configuration. He said on the road to Parcel C there is a landslide complex which consists of two separate slides that coalesce, and there were a number of borings and tests that were drilled in and around this landslide to figure out its configuration. He indicated that the road crosses over the landslide hence the recommendation for remedial stabilization of the slide. Mr. Wolfe stated that borings were drilled to get the approximate configuration of the slide. He noted that while the road crosses the landslide there is no portion of the building site impacted by the slide.

Vice Chair Lovitt opened the public portion of the hearing.

Jill Pergande, 4116 Happy Valley Road, stated she is a neighbor and that she has been in touch with the Leamys since they have been going through the application process. She stated that their application is reasonable because it improves the safety of the immediate area. She said her home is downhill from that area and the improvements that they have already made have made it safer for her driveway as well as the other people who would be driving in that area presumably from Lafayette and Orinda. She noted that what they are attempting to do with the property is consistent with what the City has indicated they would like to be doing in development. She said the Leamy's have put much time and energy into responding to the questions that have come up and have made a sincere attempt to respond to the issues that have been raised.

Vice Chair Lovitt asked where speaker's house is located.

Ms. Pergande showed the Commission on the map and said it was near the "s" shaped curve on Happy Valley Road.

Peter Clark, 4103 Happy Valley Road, stated his house is downhill and is at serious risk if the landslide on parcel B and C is not fully repaired. He showed the Commission where his home is on the map. He stated that for over a year and half he and his neighbors' geologist have insisted that this slide complex be adequately mapped by large diameter borings and then correctly repaired after the full extent and character of the slide is known. Mr. Clark stated that the applicant first denied the existence of the slide then after much foot dragging confirmed it with one small diameter hole. He said further delay ensued as the applicant's geologist went back and forth with the peer reviewer, mainly over the size and extent of the necessary repairs. He referred to mitigation measure number five in the EIR where removal and re-compaction of the slide is crossed out and replaced with "a possible scenario is to focus on providing a fill buttress for the access road and leave the thick colluvial deposit in place". Mr. Clark interpreted that the mean the applicant knows the big slide is there but they refuse to test and map it correctly and they will just ignore it when building the access road directly on top of it. He stated that this unacceptable to his family and neighbors given that millions of dollars of property and their personal safety would be put at unnecessary risk. He stated his other concern is drainage on parcel A, which is a very steep hillside and the site of numerous landslides in the past. He noted that the EIR states the runoff will be handled onsite with out professional assessment of the current situation. He said the only study he can find on how drainage works is from the 1988 EIR, which shows two storm drains running across his lot. He stated that neither of those storm drains exist and it is unclear whether there is enough capacity for current runoff let alone anymore for future development. Future refusals by the applicant to adequately test and repair the slide on parcels B and C and to take drainage on parcel A seriously will only result in more delays, more wasted time, and more cost. He asked that the Commission save the applicant both time and money by requiring them to adequately retest and repair the big landslide whose existence is undeniable. 5-1 5-2

Commissioner Humann asked the speaker if he is concerned about the slide now in its unimproved condition.

Mr. Clark stated that is not nearly as worrisome as after development because the development keeps the land wet and allows water to channel into the slide plane and create slides. That is why these landslides like Toledo Court or Quail Ridge come after development rather than before.

Peter Colby, 4109 Happy Valley Road, stated that his home is in line for the slide if it moves again, as it is a down slope property. He indicated he had not reviewed the Supplemental EIR as it became available on Thursday and he was on vacation. He stated he was unable to take the document with him on vacation because it was so large. Mr. Colby asked if the Commission had reviewed the full document and said he did not feel there could be a meaningful discussion when the document came out so recently. He referred to staff's comments that mitigation has been outlined sufficiently for this point in the proceedings. He said that there is an idea of what mitigation needs to be and the rest of the work will happen after approval. Mr. Colby stated he and his down slope neighbors are not comfortable with that. He stated that for twenty years the prospective developers have acted as though there was no significant slide; they have only admitted surface slides and small slides but nothing big. He indicated that only after the consultant he and his neighbors hired went out and nudged the City into looking harder and getting peer review finally was this very significant slide revealed. He said that if the City approves this project then he and his neighbors are left to trust the same consultants that ignored the slide for twenty years. He reiterated that he is not comfortable with trusting the same consultants who ignored the slide to do the right thing after the project is approved. He stated that the applicant is anxious to get approval and thinks Mr. Colby and his neighbors will be effectively silenced after that. He noted that after approval the only recourse would be to the courts. Mr. Colby referred to Mr. Wolfe's comment where he indicated that the building site is not affected by the slide and he asked if only the residence is not affected or if all outbuildings, pools and tennis courts etc. are required to be limited to that site. Mr. Colby stated that if they are not then he would submit that the same issues that interrupt drainage and burden the slide and create a further slide are still there. He said it is unknown if the outbuildings are going to be confined to the building site and he is not sure what the answer is to that question. Mr. Colby said that in summary all down slope neighbors are concerned that the mitigation work and investigation work be done now and the mitigation work be laid out before approval, not after. 5-3

Vice Chair Lovitt referred the speaker's questions to Mr. Bowie and asked that he address them when he speaks during his rebuttal.

Paul Seidelman, 2477 Cherry Hill, stated that a year ago he appeared before the Commission and indicated that there were significant slides involved with this property that were not mapped and not analyzed in their

original documents. He said that after being called a fancifier by Mr. Bowie, additional borings were taken and grading which then amounted to 8,000 yards has now become 64,000 yards in order to fix this situation. Mr. Seidelman stated that this slide has not been properly analyzed as of this date. He indicated that only one boring penetrates the slide. He noted that no other borings penetrate the base of the slide. He stated that on his client's property, Tim Johansen's property, the slide is 44 feet deep at the house. He said the landslide mapping which still doesn't show those slides that Mr. Kropp identified in April of last year, and shows this slide complex stopping at the property line. Mr. Seidelman noted that the map fails to show that it crosses the property line and underlies his client's homes to a depth of at least 44 feet. He said the borings stopped at 44 feet and had not encountered the base of the slide. He indicated that the slide complex extends at least 150 feet beyond the property line and 200 feet below the one boring that encounters the base of the slide. He said based on this one boring a sub-stability analysis was done using values of cohesion and values of friction that are generally higher than are recommended for the soils in Lafayette; an 18 degree angle of internal friction instead of a 14 or 15 degree angle and a cohesion of 600 pounds instead of a cohesion of 100 or 150 pounds at most. He stated that it is doubtful that cohesion is even actually real in a long term analysis of the landslide.

Mr. Seidelman said he questions the geometry, mapping, and analysis of the slides. He pointed out that there is no discussion as to how it will be dewatered. He said 28 feet below the surface is lower than the creek so a pump would be required and then the slide's stability relies on a pump. He thinks there are ways around this with careful design and geotechnical input. He thinks the project is feasible if the work is done right, but to date he has not seen geotechnical work that meets the standard of care. He noted that some people will say that it can be done later on, but his clients have no assurance that what is being done to a landslide that goes onto their property right now, will not result is serous damage to their property. Mr. Seidelman said it can be mitigated and it can be designed and taken care of but the time to do the analysis and mitigation is now at the time of the environmental impact stage. He indicated that the California Environmental Quality Act says you are supposed to understand and mitigate the impacts associated with the project. He said this report doesn't even show that the slide crosses onto his client's property. 5-4

Commissioner Holt asked the speaker to state his name and level of expertise.

He said Paul John Seidelman, and he is a geotechnical engineer, a licensed geologist, a licensed engineering geologist, a licensed civil engineer, and a licensed general engineering contractor. He said he has been practicing for 32 years in this area.

Commissioner Humann asked if the Kropp report which was the peer review for this development omits slide information.

Mr. Seidelman stated it was not the Kropp report. He said the Kropp report identifies numerous landslides.

Commissioner Humann clarified that those slides identified by Mr. Kropp's report are not shown on the map before the Commission.

Mr. Seidelman said that is correct and even the main slide he is concerned about stops at the property line and just a few feet up from the property line they have a boring that shows the base of the slide is 38 feet below the ground surface and magically they stop the slide lines at the property line. He said he knows they extend all the way across the properties on the other side of the fence and go to what used to be a swale in front of those properties.

Commissioner Humann stated that he is not a soils engineer and asked Mr. Seidelman's opinion regarding further evaluation of this issue after the tentative map has been approved and it is folded into the improvement plans and the grading of the project. He recalled that Mr. Seidelman previously said that he thought the project was feasible and the repair of the slides was doable. Commissioner Humann asked why the slides couldn't be evaluated further at a later date. He said if it becomes cost prohibitive then the clients have no project.

Mr. Seidelman asked where in the report is the impact discussed of moving 64,000 cubic yards. He noted there would be dust and noise and asked again where there is discussion of the impacts. He noted that if the site is dewatered the soils underneath Tim Johansen's house will be dewatered also. He stated that Tim Johansen's house sits on 40+ feet of clay soil that is currently quite wet and if you dewater that soil it will shrink creating an unstable situation. He stated that the best solution would be for a design team to talk about the technical 5-5

issues. He continued to say that in his opinion a lesser dewatering project could occur that would hold adequate water levels in the repaired slide and still not dewater the property under Mr. Johansen's house. He said that is a fine mitigating point that might save hundreds of thousands of dollars worth of damage to the Johansen house; he noted that it is not in the report. He said the fact that the slide extends under the house is not in the report; he said he would think that the California Environmental Quality Act would require that landslides are at least delineated before they be mitigated. He noted that the Commission had to ask the applicant to show where the landslide was on the map and that there is not a good map that shows it correctly and he and his clients have been asking for it for over a year. He said one slide is known to be there and there is another slide immediately to the west of it that he is not certain if it is a slide, it could be an erosional feature or it could be a bedrock landslide. He advised that the only way to really delineate these slides is to down-hole log it. He said there has been the equipment to do it available and it could have been done by now, but only small diameter borings have been done so far. He said he was told a year ago that all the data needed had been collected. He said the numbers went from 8,000 to 64,000 cubic yards of repair and there may even be more to the west and it needs to be evaluated.

Paul Kenny, East Bay Municipal Utility District, stated that his purpose at the meeting is to say that EBMUD is most interested in purchasing parcel A for a pumping plant in the future. He stated that the District has been working with Robin and Kris Leamy whom have been very cooperative. The district has found them to be very practical in their preliminary negotiations for the purchase of this parcel. He stated that he would be glad to answer any questions.

Commissioner Holt asked if EBMUD engineers have looked at the site as it relates to slide repair.

Mr. Kenny stated that the District has looked at the peer review conducted in the last several months.

Commissioner Holt asked if EBMUD saw any problems.

Mr. Kenny said the District had no comments.

Mr. Bowie stated that from what he has heard this evening it seemed that the neighbors should be the chief proponents of this project because if there is no project then the slide does not have to be repaired, and the homes may slide. He noted that Mr. Seidelman stated this is a feasible development site, but his concern is over fine tuning the scale and scope of what repair is actually going to be made. He said that he thinks this is a recommendation for this project not against it because everyone can agree that whatever conditions exist taking care of a landslide has to result in a better situation. Mr. Bowie directed the Commission's attention to the supplemental EIR page 55 where it states as landslides and unstable soils continue to be potential impacts to the current project the nature and scope of these impacts have been better defined by the current plan it is the opinion of the city and its consultant, Alan Kropp and associates, that the total collection of project documents and the analysis contained in this section provide an accurate and complete disclosure of the potential geotechnical impacts expected from a three lot subdivision at this stage of the review. Mr. Bowies reminded the Commission that this stage of CEQA review does not require that all experts agree. He said CEQA recognizes the possibility that the experts may disagree. He said that here the experts agree that it is feasible to develop the property. He said that all the experts agree on the repair of the landslide, which is a condition of the project. He said the dispute is whether or not the preliminary investigations are complete. Mr. Bowie noted that the City's own consultant has said they are complete. He said that Mr. Seidelman is not accurate in his comments stating that there has been only one test boring which was not enough to determine the geometry of the slide. He said that Mitch Wolfe confirmed that there have been four test borings, which have defined the geometry of the slide. He said the applicant's team has come up with a quantitative measurement of the amount of grading. Mr. Bowies said that if there was only one test boring and the geometry wasn't known then they could not have come up with the estimate of the quantity of soil involved.

Mr. Bowie stated that the conditions and the EIR suggest that this is an onsite stabilization program done in phases. He said the EIR and the staff materials indicate that the capacity for onsite storage is around 25,000 cubic yards. He said the conditions and mitigation measures more than adequately address any problems that might arise. He indicated that the level of work that has been done to date has been in excess of what one would normally do at this stage of the proceedings. He stated that the conditions of approval require that the landslide be repaired. Mr. Bowie suggested that no one does offsite studies in response to Mr. Seidelman's

comments. He said that the applicant would have had to have neighbor's permission to drill offsite at the applicant's expense and liability. He reiterated that is not unusual that they have not mapped landslides offsite.

Commissioner Holt asked to speak with the consulting geotechnical engineers.

Alan Kropp, peer reviewer for the City is a licensed geotechnical engineer.

Commissioner Holt stated there is obvious concern about the slides and asked if in Mr. Kropp's opinion the supplemental EIR is adequate in its mitigation of these issues at this stage.

Mr. Kropp stated that he believes at the tentative map stage there is adequate information. He said there are still some uncertainties. With further studies during the final map process there may be some changes but at the tentative maps stage it is adequate.

Commissioner Curtin-Tinley noted that the supplemental EIR on pages 48-51 summarize all the various studies, site inspections and mapping that was done. She said she has identified 6 or 7 tasks that have been done and asked Mr. Kropp to summarize the different analyses, mapping and investigation that have been performed.

Mr. Kropp stated that historically a lot of studies have been done to evaluate what are very clear and obvious shallow geology and landslide features. He said that it is only recently that the deeper exploration work has been done. He noted that the deeper exploration and some shallower work that would define the limits of bigger deeper slides at the edges, better understandings have come up with regard to some big features that are out there. He stated those bigger features are what Mitch Wolfe pointed out earlier and that is a double pronged landslide feature that merges into one feature and continues going offsite. He stated it is true that the July 2007 mapping by Purcell an Rhodes shows that landslide continuing offsite; it does not stop at the property line, it goes downhill. He indicated there is also a significant portion of one of the two prongs of the slides that continues down slope and there is also a significant portion of one of the prongs offsite on the property to the southwest, so there is offsite continuation of the slide downhill and some on the vacant property to the southwest.

Commissioner Holt asked Mr. Kropp if the slides can be adequately repaired.

Mr. Kropp said they are in different situations with regard to the down slope versus the lateral or upslope margin. As he understands it, this heavily wooded area is not going to be repaired, as it would require the removal of extensive vegetation to fix the offsite portion of the southwest. It would be rare for that to happen. He said the remaining repairs within the slide should generally stabilize the offsite portion to the southwest. He said if all the remaining slide material is removed up to the property line that should adequately constrain those slide materials from moving any farther onto the down slope properties.

Commissioner Chastain asked if the Commission really understands the nature of the problem. He said there is an admitted sense of the unknown about what is really going on there but it will be examined further. He asked what should be examined and what needs to be accomplished.

Mr. Kropp replied that he agrees with Mr. Seidelman that further characterization is needed. He stated that he would assume that during the final map and lot development stage down hole logging would be done which is a much more effective tool in clearly defining depths of landslides. He said that large diameter borings would be appropriate at the next phase.

Commissioner Chastain asked if dewatering could be addressed once the issue is better known.

Mr. Kropp said that if he had to evaluate the risk to a downslope property from an existing landslide versus a repaired landslide that could cause settlement from dewatering, the unrepaired landslide is the bigger issue. He said dewatering is not an issue without merit but it can be addressed as part of the further study. Solutions could include a pump system or a shallower level of water withdrawal by gravity to the creek.

Commissioner Curtin-Tinley asked what could happen to the area if the slide was not remediated within the next ten years.

Mr. Kropp clarified that the question was regarding the double pronged landslide and stated that there is always uncertainty because it doesn't seem to have moved recently. Sometimes those large landslide complexes don't move for hundreds or thousands of years. He said the biggest concern is what might happen during a big earthquake. If earthquake-induced sliding happens, especially during a wet winter, you could get feet to tens of feet of movement that certainly would impact the Leamy property and to the extent that the landslide goes down into downslope properties, it could impact those as well. He said there is a portion of the landslide that goes across a corner of what is now identified as the building site for Parcel C. Some clarification with regards to the specific building location will be needed but it is a large building site. He said if a large earthquake in wet weather were to happen now, the worst case scenario is the slide would move.

Commissioner Humann asked if he would be correct if he said Mr. Kropp and Mr. Seidelman are more or less in agreement in terms of the extent landslide and the next level of testing that should occur, it's just that you disagree in when the testing should occur.

Mr. Kropp stated that they are in general agreement. He said the issues are what further study would have to be done and when. He said they probably would generally both agree that further study is warranted. He would say down the road and Mr. Seidelman thinks it should be done now.

Commissioner Curtin-Tinley asked if the extent of the study before them is typical for other projects. She asked if the preliminary site investigation is done at the tentative map stage and the more specific detailed borings are not done until a final map is approved because it is so costly.

Mr. Kropp stated that historically this has been the type of approach that would be taken for a project. He said we are in a transition phase. Down hole logging has been shown to be effective enough that it is becoming more common even at the tentative map stage, but it is still rare in his experience.

Commissioner Holt asked Mr. Wolfe to comment on the matter.

Mitchell Wolfe stated that he is a registered certified engineering geologist with over 25 years of experience working in the area. In fact, I used to work with Paul Seidelman. He said the level of subsurface exploration that has been competed to date is adequate for us to understand the issues and come up with conceptual methods for repairing them. He noted that Mr. Seidelman said that the one deep drilling was not adequate but suggested that he look at the work done in 2006 in a previous report by Purcell & Rhodes he would have seen that there were four other borings drilled all of which penetrated the slide mass extending into the underlying bedrock. He said they know that this slide is composed of slide debris and or colluvial soils extending a few feet into the underlying bedrock so we have a good handle at this stage of the project what subsurface geometry would be based on the one deep drilling that was done on the lower portion and the four that were done in the upper reaches of the slide in the vicinity of the road and the portion of the road above the slide. In his opinion there is sufficient information to understand what it will take to fix it. He said there will need to be additional geotechnical borings at the precise development stage of the project. He said there is plenty of information to proceed forward.

Commissioner Humann asked if Mr. Wolfe is in general agreement with Mr. Seidelman with respect to the extent and dynamics of the current slide.

Mr. Wolfe stated that he is in agreement.

Bowie stated that he spoke with Howard Martin and they have identified the sliver of land addressed in condition 22 and they are okay with it.

Vice Chair Lovitt asked the applicant and staff what process the City has to ensure a proper development takes place and what the timing looks like.

Ms. Sinnette stated that improvement plans will have to be prepared prior to a final map being recorded. She said the improvement plans will provide details on the remedial landslide repair, drainage system, the configuration and location of the roads and trails. She noted that all of the details that it takes to build a subdivision will be in a set of plans reviewed by the City Engineer.

Vice Chair Lovitt clarified that the City Engineer will receive full details of the complete plan for exploration, mitigation, and remediation as development may affect those things on the site.

Ms. Sinnette agreed with Vice Chair Lovitt's statement.

Commissioner Chastain asked about the issue that some of problems are not in the Environmental Impact Report and therefore mitigation is coming after we discover more about it. He said he is thinking particularly about dewatering that could potentially impact neighbors.

Ms. Sinnette stated that all impacts have been analyzed that are known at this stage. She stated that it is known that there are landslides that need to be repaired. She said the issue of the dewatering will be dealt with as part of the drainage plan. She said it will be mitigated by showing it with the grading plan that shows sub-drainage as well as surface drainage to make sure surface drainage is taken care.

Vice Chair Lovitt asked how it is known that by dewatering the existing slide that it is not going to create problems. He asked how the City will ensure the work is done properly.

Commissioner Holt indicated the Commission will have to rely on the geotechnical engineering. 5-6

Ms. Sinnette stated that the insurance is in mitigation measure 42 which is the mitigation measure dealing with geotechnical work. She said there are also conditions related to drainage and grading plans so those items will be mitigated. She said the impacts have been addressed, but that she doesn't consider the dewatering to be an impact.

Commissioner Chastain stated that it is an impact if what was said tonight was correct. He said dewatering could affect the neighboring house because the clay could dry out and then settlement would occur. He said he thinks it can be mitigated and he is not worried that the project is not feasible, but he is concerned with making sure there is a proper process and that it is clear what is trying to be mitigated. He indicated that there should be a condition that ensures once the situation is well known and understood any issues that the development produces will be mitigated.

Ms. Sinnette stated that condition 42 states that the City Engineer has final say in all remedial work required.

Commissioner Humann asked how a development that has been approved with an Environmental Impact Report and during construction a new situation comes up that will deviate from what was expected with regard to environmental impacts, would be handled.

Ms. Sinnette stated that if impacts are identified at a later date as part of the project then it is up to lead agency to determine if it is a significant impact and if it is a Supplemental Environmental Impact Report or an addendum to the original report would need to be done.

Vice Chair Lovitt said it is worth stating the process for all in attendance. He stated that the project is under the overall supervision of the City Engineer and he is really is control of what happens on the project.

Ms. Sinnette noted that was true, the City Engineer will work in conjunction with the project engineer, but the City Engineer has the final say.

Commissioner Chastain asked who determines the extent of the geotechnical investigation.

Ms. Sinnette stated the City Engineer in conjunction with Kropp and Associates.

Commissioner Humann indicated that he knows staff is comfortable moving forward based on the staff report, but asked the City Attorney if legally the City is comfortable moving forward.

Malathy Subramanian, City Attorney indicated that there can be a disagreement between consultants. She noted there does not seem to be a disagreement and that everyone seems to have agreed that additional testing will occur in the future. She said this is acceptable because the City is doing what they know at the time.

Vice Chair Lovitt closed the public portion of the hearing.

Commissioner Holt asked if staff is comfortable with the comment Mr. Bowie made regarding condition of approval 22 with regard to the easement.

Ms. Sinnette stated that it is the 1975 map that created this area of Happy Valley Road which is when the open space and trail easements were put in place. There was a requirement to dedicate that land in the 1975 map and it was never done.

Commissioner Curtin-Tinley asked the City Attorney to comment on the letter from Mr. Shaffer. She asked if the Commission could make a decision on the project or if they are limited to the EIR.

The City Attorney referred to the letter and stated that all of the City's records indicate that the EIR was certified. There is a letter from planning staff to Mr. Barsell, the previous owner, which states that the Planning Commissior certified the EIR. She stated there is a resolution from the City Council which references the Planning Commission certification of the EIR. She said the agenda description could be read in two different ways. It could be read that you are only considering the SEIR or it could be read that you are considering everything so out of an abundance of caution she suggested the Commission continue the item to make the final recommendation to the Council.

Vice Chair Lovitt asked for clarification from the City Attorney on the next steps the Commission should take.

The City Attorney clarified that the Commission can make their comments and any items that need to be addressed can be brought back either on consent or as a regular item. She said the agenda will be updated to clarify the confusion regarding what the Commission will act on.

Vice Chair Lovitt reiterated that the Commission is charged with reviewing the project and making comments, reviewing the Supplemental EIR and reviewing the conditions of approval. He stated that the Commission has seen all of the project information except for the new information in the geotechnical studies. He proposed the Commission begin review of the project to see if there are any issues with the ability to make findings.

Commissioner Holt acknowledged staff for their hard work. He said he can support the project. He is pleased that there are now three parcels to deal with. He thinks the neighbors' concerns regarding the instability of the dirt can be addressed to the point that the situation will be better that it is now.

Commissioner Curtin-Tinley stated there has been no opposition or concern with the project, there is only a concern for the timing of further geotechnical studies. She is in support of project and believes that the Supplemental EIR fully analyzes and suggests mitigation measures for the impacts. She said this level of review is adequate in her opinion for tentative maps. She noted that some of the neighbors were concerned that development could occur before the landslide is remediated and she said this is not true.

Commissioner Humann agreed with Commissioner Curtin-Tinley and stated that he feels comforted by the fact that so many people are concerned and will be watching what goes on to ensure nothing is done out of order.

Commissioner Chastain stated that he echoes all comments from his fellow Commissioners. He hoped that the information from the three geotechnical engineers is reviewed by the City Engineer so he can take a careful look at the nature of the investigation going forward, so what was talked about is captured, and so the City is being thorough.

Vice Chair Lovitt stated he has no concerns with the project and has nothing to add. He stated the next charge is to review the SEIR and asked for Commissioner comments.

Commissioner Curtin-Tinley noted that her concern with mitigation measures 2 and 3, regarding the authority being in two different jurisdictions, were addressed by the applicant.

Commissioner Holt stated he is not clear how the City of Orinda authority extends into Lafayette.

Ms. Sinnette stated that the property is within the boundary of the city of Lafayette and therefore in Lafayette's jurisdiction, however the access road is in Orinda's jurisdiction. She updated the Commission on the encroachment permit by stating that she confirmed with Orinda that all improvement have been done per the permit for the roadway. She said the road is safe as it is designed now. She said the City's traffic consultant noted that because of the project it would help to have additional signage, but it is up to Orinda to determine if they want additional signage.

Commissioner Chastain asked staff about the comment on condition 37 regarding the 100-year storm.

Ms. Sinnette stated that when the project was first reactivated there were some concerns about the way mitigations measures were written 20 years ago versus how they are written now with the level of technology and information. She said that the 100-year storm was taken from the old mitigation measure and she can confirm with the City Engineer to see if he feels it is still applicable. She stated that issue can be addressed in the responses to comments.

Vice Chair Lovitt asked if based on new geological updates the Commissioners have any special questions or would like to go through the conditions of approval.

There was no comment from the Commissioners.

Vice Chair Lovitt clarified that all comments heard tonight by the Commission, the consultants, and others will continue to get folded into the Supplemental EIR.

Ms. Sinnette indicated that was correct. She said after the 30-day public review period, which ends July 14, 2008, all oral and written comments will be responded to in writing.

Vice Chair Lovitt asked if both the comments and responses will be included in the SEIR.

Ms. Sinnette said yes, prior to the City Council making a final decision there will be a final SEIR including responses.

Commissioner Curtin-Tinley clarified that this is a process unique to this project because of the settlement agreement and the Commission will not see the final EIR.

Ms. Sinnette agreed with the statement.

Vice Chair Lovitt asked for direction regarding the motion the Commission should make.

The City Attorney stated the Commission will make a recommendation to the Council on the SEIR.

Vice Chair Lovitt clarified that the motion should contain a recommendation to the Council to approve the project, the SEIR, and the draft Conditions.

The City Attorney stated that should be the motion at the July 3, 2008 meeting and tonight's motion should be just continue the item to the July 3, 2008 meeting.

Vie Chair Lovitt confirmed that the Commission feels comfortable with this item going on consent calendar. He noted that if any issues come up it can be pulled and put up for discussion.

Commissioner Holt made a motion to continue the item to the July 3, 2008 Planning Commission meeting to go on consent calendar and recommend approval to City Council.

Commissioner Curtin-Tinley seconded the motion which carried. (5-0-0)

Comment #5 Adopted Minutes from the June 19, 2008 Planning Commission Hearing

5-1 As discussed in Section 3.2.3 of the Draft SEIR, the current plan includes the complete repair of two on-site landslides and a swale containing a complex of landslide debris and colluvial deposits. To address this comment, the project description has been revised to clarify that the on-site portion of the landslide at the parcel B/C lot line will be excavated west of the road to the extent necessary for the buttress fill to stabilize the road. The on-site portion of this landslide and swale lying east of the road, will be completely repaired through excavation and compaction. (See Chapter 10 for revision of the project description.)

In order to determine the maximum level of impact related to the above mentioned repair, it was assumed that the entire swale area would be removed and replaced as a buttress fill. A work area 310 feet along the roadway and 260 feet along the toe of the landslide area would have an estimated buttress volume of 63,500 cubic yards. Upon review of this repair scheme, AKA commented that the estimate of 63,500 cubic yards did not appear to include any remedial grading uphill of the road within the southerly swale either within or beyond the subject property. If that entire area was to be graded it could increase the estimated volume by 50%. (Draft SEIR, p. 53) While it is true that repair of the landslide uphill of the road could increase volumes by 50%, this off-site portion of the landslide is not being repaired. To prevent this off-site portion of the landslide from moving onto Parcel C during repair activities, temporary shoring can be installed. (See Draft SEIR, figures 5 and 6).

Mitigation measure 5 has been revised to provide clarification on the intent and anticipated scope of the specific subsurface investigations and analyses to be included in the design-level improvement plans. These revisions do not involve any changes in the City's significance determination but are simply a clarification of the existing analysis and recommended mitigation measures, so recirculation of the SEIR is not required. (State CEQA Guidelines section 15088.5.)

5-2 Since the exact location or size of house for Parcel A is unknown at this tentative map stage, a specific drainage plan has not been designed. A site-specific drainage plan will have to be submitted with the future design review application which would be subject to additional public review through the design review process and would be subject to the performance standards identified in Mitigation Measure 12. It is expected that the drainage plan will employ a dissipater system as is typical for a single-family home or a vegetated swale as shown for Parcel C.

5-3 A portion of the identified homesite for Parcel C is impacted by the landslide. The portion of the landslide will be remediated and therefore not a design consideration for any house or accessory structures proposed for Parcel C. Also see Response 7-15.

5-4 See Master Response 9.5.3b.

5-5 Construction-related impacts are addressed in the Draft SEIR in Section 3.2.3 (p. 53, par. 5), in Section 3.2.4 (pp. 62-65), the Air Quality and Noise sections of Chapter 3 (pp. 77-80) and mitigation measures 11, 16, 17, 18, and 28. Also see Master Response 9.5.3b.

5-6 See Master Response 9.5.3b.

Sinnette, Christine

From: Peter K. Clark [pkclark@ucdavis.edu]
Sent: Tuesday, July 08, 2008 11:45 AM
To: Sinnette, Christine
Subject: Leamy (MS504-87CCII) DSEIR

Christine Sinnette, Senior Planner
City of Lafayette

Ms. Sinnette:

The following are my comments on the draft supplemental environmental impact report for MS504-87CCII (Leamy):

(1) Mitigation Measure 5 is vague and internally inconsistent. In one place it says "The two active landslides on the site shall be repaired", while later on it contradicts this statement by saying "A possible scenario is to ... leave the thick colluvial deposit in place". Given that the "thick colluvial deposit" is part of the big landslide complex on Parcels B and C, you can't repair the landslide and leave it in place at the same time. The SEIR must be more explicit about the location and extent of the landslides to be repaired, and should also rule out the possibility that the largest landslide will not be repaired at all. 6-1

(2) I would like to note that the applicant's insistence on cutting corners with respect to geological testing (and the City's inexplicable willingness to oblige him) have caused him long delays. He could have done the requisite tests in the spring or early summer of 2007 and now be well on his way to building out the subdivision. Instead, his continued refusal to do the required testing in a timely manner guarantees the downhill neighbors' strong opposition, first before the City Council and then in court. At the June 19 Planning Commission meeting, all three geologists (Wolfe for the applicant, Kropp for the City, Seidelman for the neighbors) agreed that large-bore drilling will eventually have to be done to understand and then repair the big, deep slide complex on Parcels B and C. Kropp also said that while it was possible to wait on the tests, in recent times the usual practice has been to complete them before the EIR is finalized. If the applicant is required to perform the tests now as opposed to later, it will save everybody a substantial amount of time and money. 6-2

Peter K. Clark
4103 Happy Valley Rd.

7/8/2008

Comment #6 Peter Clark, July 8, 2008

6-1 See Response 5-1.

6-2 See Master Response 9.5.3a. The commenter has misunderstood the comments made by Alan Kropp. See Response 4-1. As previously stated, sufficient subsurface investigation has been conducted to characterize the lateral and vertical extent of the landslide and develop conceptual remedial repairs. Once a tentative map is approved but prior to final map acceptance by the City, subdivision improvement plans will have to be reviewed and approved by the City Engineering Services Manager. (See Chapter 10, Mitigation Measure 5.) The improvement plans will reflect site specific subsurface investigations and analyses, and will include recommendations and sufficient details to confirm and substantiate the final design and the findings of this SEIR.

Comment #7

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July 14, 2008

VIA EMAIL AND FACSIMILE
Christine Sinnette, Senior Planner
Lafayette Planning Services Division
3675 Mt. Diablo Boulevard, Suite 210
Lafayette, CA 94549

Re: Comments on Leamy Project Draft EIR (Minor Subdivision MS504-87)

Dear Ms. Sinnette:

These comments on the June 2008 Draft EIR are submitted on behalf of the five families listed below who live near the project site. We look forward to the City's detailed response to each comment, and we expect the City to do what is necessary to assure a complete and adequate EIR in full compliance with CEQA. Given the fundamental problems described below, after addressing these problems the City must recirculate a new legally adequate draft EIR.

1. Improper to Rely on 1988 EIR.

The City's claim that the 1988 EIR was certified (as that term is used in CEQA), is improper and irrelevant to the extent the Draft EIR and the City treat the contents of the 1988 EIR as deemed adequate. It simply is a collection of 20-year-old studies and conclusions, none of which should be relied on without thorough review and updating. The 1988 Planning Commission "certification" vote has no legal significance, as the 1988 EIR never was used to support any discretionary approval. This means that no opponent ever had an opportunity – or reason – to sue the City and challenge adequacy of the old EIR.

I understand that during the June 19 Planning Commission hearing the applicant's attorney told the Commission that a 180-day statute of limitation applied and so opponents now are barred from challenging the old EIR. However, there was no event triggering the start of that time limit – either an approval or actual start of the project. Please refer to my letters commenting on the Notice of Preparation for more detail on this topic. 7-1

I also understand that during the hearing staff mentioned two documents as evidence of certification: a letter to John Barsell and a City Council resolution. Those documents do not support the City's position. The October 14, 1988 letter to Mr. Barsell is simply notification that on October 13, 1988 the Commission "certified the Final EIR but denied subject application ...."

Without an approval that can provide the basis for challenging the EIR, the Commission's preliminary step of certification has no legal significance. City Council Resolution No. 76-92 adopted in 1992 served to deny Mr. Barsell's subdivision application. Recital No. 4 in the Resolution may have stated that the EIR was certified, but merely including that claim as a recital does not make it true; this reference to the earlier action also has no legal significance.

The City should list every aspect of the 1988 EIR being relied on by the Draft EIR, and evaluate whether that reliance is valid and reasonable given changed circumstances, new regulations and standards, and other factors applicable to producing an adequate EIR. Given the passage of time we doubt there is any aspect of the 1988 EIR that does not require updating. 7-2

In reviewing the comments sent in response to the Notice of Preparation, it appears likely that other agencies and the general public were misled by the City describing this new report as a "Supplement" to an EIR, because that term erroneously implies it is simply augmenting an earlier EIR that already was properly deemed adequate. The City should evaluate how this wording may have affected how commenters dealt with the NOP and the draft EIR – as they may not have questioned topics allegedly covered in the 1988 EIR. A new notice clarifying the status of the documents may be needed for full CEQA compliance. 7-3

I found one obvious example of misusing the 1988 EIR, and I am sure there are more. On page 60 the Draft EIR declares that changes in stormwater runoff must be compared to drainage conditions as they existed at the time of the earlier EIR, disregarding any alterations in the past 20 years. This clearly is inappropriate under CEQA. Even if the 1988 EIR had been certified, changed conditions affecting drainage patterns or runoff volumes must be recognized. The City may want to apply this misguided approach, but I doubt the Regional Water Quality Control Board will accept 1988 as the baseline for testing its requirement of no increase in runoff. Adding to the confusion, the Draft EIR also states that "hydrology effects that predate the project are part of the existing baseline" (bottom of page 60). Does that line refer to current conditions before the project is built, or conditions before the first proposal was submitted in 1987? The EIR needs to clarify the situation and revise runoff calculations as necessary. 7-4

The Staff Report for the June 19, 2008 Planning Commission hearing on the project states (top of page5): "The [1988 EIR] was used as a basis for information about the setting of the project site and surrounding area, and for thresholds for determining impact significance." It is unwise and inappropriate to rely on a 20-year-old report to provide baseline condition information or to set thresholds of significance – especially when it has no legal value. 7-5

2. Impacts of Increased Grading Volume Not Evaluated.

Last year the applicant and City insisted that only minor grading would be needed – which the earlier reports estimated at only 11,500 cubic yards of soil. Now, finally, the Draft EIR admits that grading to repair landslides and stabilize roads and homesites will involve a much larger and deeper area. The new estimate is 79,500 cubic yards – almost 7 times as much. Even that figure may be low, as Peer reviewer Alan Kropp admits they have not yet fully

mapped the extent of landslide area requiring mitigation. Mr. Kropp warned that actual grading may be 25-50% more than estimated (see page 53) – or as much as 139,000 cubic yards!

All this soil will be excavated, hauled to the stockpile and dumped, hauled back to the landslide mitigation site and dumped, then compacted and graded. The contractor likely will use a combination of standard dump trucks – which hold up to 10 cubic yards – and very large scrapers that can carry up to 25 cubic yards. Scrapers will require fewer trips but likely will cause more dust, noise and diesel emission impacts. Assuming a 50-50 mix results in an average load of 17.5 cubic yards per trip. Thus hauling soil to and from the stockpile will require at least 9,000 truck trips back and forth within the site (for 79,500 cubic yards) and possibly up to 13,500 truck trips (for 139,000 cubic yards). Landslide repair operations also will require excavators, graders, water trucks and other heavy equipment. All this activity on a relatively small site surrounded by houses must have some effect on the neighbors and the environment, such as noise, diesel emissions, dust, and carbon dioxide (global warming) emissions. But the Draft EIR fails to even recognize these issues. We don't even have an estimate for how long the grading work will take, in terms of nuisance effects on the community. This is a fatal legal defect. 7-6

One item of special concern is emissions from so many construction vehicles for an extended period close to homes with children living nearby. Mitigation Measure 28 only deals with dust. The Draft EIR quotes Air District CEQA Guidelines that recognize concern with vehicle and equipment exhaust (page 78), but then provides no analysis or even recognition of the problem and offers no mitigation. According to the Draft EIR, grading for the landslide repairs will be done in stages, prolonging the time of emission exposure. Does this mean children will be at risk playing in their yards next to the project site? We have no way of knowing because the Draft EIR ignores the issue. 7-7

3. Impacts of Stockpile Not Evaluated.

As discussed above, the Draft EIR acknowledges that grading will involve much more soil movement than the City or applicant previously recognized. Consequently, a stockpile is proposed on the property. However, there is very little information about the stockpile, and no analysis at all of its potential to cause impacts.

The description of location and size is limited to stating it will be in the grassland area and kept at least 25 feet from residences. Figure 4-B shows an outline, but the figure lacks a scale so it is difficult to estimate width or length. (The lack of scales on most of the figures is another deficiency of this EIR). We are told the stockpile will hold 24,400 cubic yards of soil at any given time, but there is no information about its height, or what grade of slope is assumed. 7-8

The stockpile will immediately abut five houses on Sundown Terrace. Figure 4-B shows the stockpile extending up to the property line, despite the supposed 25-foot setback. It also shows at least one tree within the stockpile footprint, contrary to Mitigation Measure 11. Measure 11 states that the stockpile will avoid coastal scrub habitat, but I could not find any map 7-9

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or description of that habitat to see if it is near the stockpile. Figure 17 in the 1988 EIR shows coastal scrub that seems to be in the stockpile area, which would violate Mitigation 11.

This lack of information makes it impossible to determine if there is a risk of impacts from the stockpile. Is the site feasible given the supposed restrictions of Mitigation 11? How high will be it, and how steep the slopes? Will there be dust or erosion problems affecting neighbors? What will be the effects of dirt movers and dump trucks hauling soil to and from the stockpile? What mitigation measures will apply to its construction and use? The attitude of the EIR appears to be "trust us, the City will make sure it is done right." That may be allowed when the basic information and analysis is provided and we are only talking about fine-tuning plans, but it is not acceptable under CEQA in this situation, with a near total vacuum of detail. How can there be meaningful public review when there is so little information and no analysis? The stockpile will handle at least 79,500 cubic yards of soil and possibly much more. So much dirt-moving activity must have effects that should be recognized and discussed. 7-10

4. No Consideration of Construction Noise Impact.

The Draft EIR dismisses the question of noise simply by stating that the City Code has standards for hours of construction and equipment performance. However, none of the standards are given in the report. EIRs typically provide calculations of noise levels at nearby sensitive receptors – but the question is not even recognized here. When heavy construction will occur close to houses, it is common to require mitigations such as temporary sound barriers, muffled equipment, etc. Again, the substantial increase in grading will translate to more equipment operating longer and moving closer to neighboring homes. CEQA does not allow the City to simply say "Our regulations will protect you" without any quantification or analysis to confirm the standards are sufficient to avoid a significant impact. Sometimes courts rule that existing regulations are not sufficient to mitigate a significant impact. We can't evaluate this question because the EIR does not cite the regulations or quantify the impacts. The court will not accept a conclusion of "no impact" where there is no analysis to support the finding. 7-11

5. Drainage from Repaired Landslide Not Considered.

The project design now includes detention treatment systems supposedly designed to handle runoff from the 10-year and 100-year storms. As far as we can tell, runoff volumes have been calculated based on surface water flow. The size and location of basins, swales and other features have been designed using this data. However, there is no mention in the Draft EIR of how water drained from the landslide repair area will be controlled and treated. Figures 5 and 6 show subdrains diverting water from the landslide, which are critical to keep the slope stable. Without any estimates of volume from those subdrains, there is no way to tell if the proposed drainage control and treatment system will work. If the added water requires substantially increasing the size of basins and swales, that may affect outside properties or force changes to homesites in the project. Furthermore, this may be more than just a question of sizing, as the added water and its point of discharge may require relocating the drainage system. 7-12

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One serious unanswered question is how the applicant will handle subdrain water being discharged below the elevation of the drainage system. It cannot simply be allowed to flow downhill onto the neighbors' properties. Will pumps be installed to bring the water uphill into the new swale and detention basin? If so, will the City require a backup system and regular inspections to ensure continued operation? The EIR must address this situation. 7-12

6. Inadequate Data to Support Revised Design Alternative.

The Draft EIR presents only one alternative reflecting changes to the subdivision layout. This violates CEQA's requirement for a reasonable range of alternatives. Paul Seidelman suggested homesite locations on the other side of the ridgeline that likely can avoid the need for substantial landslide repairs, but the EIR does not acknowledge those proposals or even discuss why those options are not studied.

The Draft EIR improperly concludes that moving the Parcel C homesite west of the access road means that no landslide or swale repairs would be needed, and a stormwater control system and pond at the south end of the property would not be needed. First, the limited borings done to date are not sufficient to support the claim that no repairs would be needed. As Mr. Seidelman will discuss in more detail in his comments, the absence of landslide evidence in small-bore holes does not prove there is no landslide in the vicinity. The full coverage and depth of landslides on this property have not been mapped, and they very well might extend to the homesite proposed by this alternative. 7-13

Furthermore, the EIR cannot dismiss the need for runoff control measures based on moving the homesite, without any documentation or discussion on the topic. Where will runoff from the road and surrounding areas be channeled and treated? Where will subdrains from the road buttress discharge? The alternatives section, and handling of this particular alternative, are inadequate under CEQA.

7. Mitigation Measure 5 Creates Added Uncertainty.

Mitigation 5 contains a caveat that is alarming to neighbors of the project and spotlights the fatal legal flaw in this EIR. After stating the need for full landslide remediation, it suggests that a less expensive shortcut may be allowed: "to focus on providing a fill buttress for the access road and leave the thick colluvial deposit at the eastern limits of the site (Boring B-2) in place." Now we are faced with a double uncertainty: not learning until after more research is done exactly where the landslides end and what work is needed to make them safe; and whether the applicant will be able to pressure the City into letting him get by with a cheaper solution. 7-14

Again, it is the antithesis of CEQA to leave such fundamental determinations out of the EIR, hidden from public scrutiny and left to the discretion of staff. This is not a question of fine-tuning needed repairs, or selecting between two alternative mitigations that have been properly vetted in the EIR as providing equivalent protection. The public is left with absolutely no idea where there may be problems, and what will be done to correct them. The City Council is being

asked to approve a plan without necessary information about its potential impacts, and without being informed of how they will be avoided. The potential ramifications of this shortcut are not even mentioned, let alone evaluated. This EIR fails the CEQA mandate to ensure informed decision making.

8. Approving Parcel Map May Limit City's Flexibility.

The Draft EIR proposes approving the parcel map and then doing followup geotechnical studies. It is possible that those studies will show that the homesites and lot lines should be moved – perhaps substantially. They may even conclude that there are only two safe locations for houses. However, by then the applicant will have three approved parcels with approximate homesites on each. Attempts by the City to force changes to the map may trigger claims of a vested right to those three lots and homesites. Again, an adequate EIR with more thorough site investigation would provide more assurance that this scenario will not arise. 7-15

9. Potential Effect on Happy Valley Road Not Evaluated.

Mitigation Measure 8 notes that the project may trigger problems with an existing landslide underneath Happy Valley Road. However, there is no analysis of the situation. Instead, the Draft EIR merely calls for a future study to identify what repairs may be required by the applicant. This is the antithesis of meaningful environmental review, and a clear violation of CEQA. The City cannot brush off this potential impact by saying "Don't worry, we will make sure the developer fixes any problems he causes." Causing closure of Happy Valley Road might have serious repercussions to nearby residents and the surrounding community, in terms of both convenience and safety. Is there a risk that the project may trigger damage and closure of the road? What alternative routes are available for residents and fire or police vehicles? The EIR must evaluate these questions. 7-16

10. No Support for Claim of No Frog Habitat.

The Draft EIR claims there is no suitable habitat for the California Red-legged Frog on or near the project site (page 67) – despite the fact that two creeks cross or abut the property. There is no other discussion of the frog. The sole support for this conclusion is a one-page letter from the applicant's biological consultant (Appendix E) which has only <u>one sentence</u> about the frog that claims there is no habitat – without even recognizing the two nearby creeks. This lack of analysis fails the CEQA standard that an EIR must be based on substantial credible evidence. The consultant's single sentence is neither substantial, nor credible as evidence. Even if it ultimately is proven correct, not discussing the creeks is a fatal defect as creeks are recognized as being the primary routes for the frog to travel around the region. Furthermore, the consultant makes a blanket reference to "habitat" without seeming to recognize that there are two types of frog habitat that must be studied: breeding habitat (typically close to water), and foraging habitat (which may be some distance from the creek). There also is no mention of the nearest recorded sighting of a frog, a basic fact always reported in EIRs. The analysis of the red-legged frog fails to satisfy current CEQA standards. Mitigation Measure 23, requiring a preconstruction survey to 7-17

makes sure no red-legged frogs are killed by construction activity, is not adequate as it does nothing to protect habitat or require mitigation for its loss. We doubt the state and federal agencies charged with protecting the frog and its habitats will accept this study as adequate.

11. Verify that Prior Comments Have Been Addressed.

The City circulated a Notice of Preparation ("NOP") for the Draft EIR. In response, I submitted a collection of letters sent to the City previously regarding problems with the 1988 EIR and the more recent geotechnical analyses being relied on. The June 19 Staff Report for the Planning Commission recognized those letters and stated that they were addressed in the Draft EIR (bottom of page 4). The letters also were included in Appendix A of the Draft EIR.

Those letters included detailed critiques by Paul Seidelman of the studies and conclusions being offered by the applicant. He also explained why additional deep and wide-bore logging is needed before the City can even begin to consider what site design is safe and what mitigation measures are required. We question the staff report's conclusion that the comments have been addressed, given the overall tone of the Draft EIR dismissing these concerns or saying the questions would be studied later. 7-18

The letters I submitted in response to the NOP that are in Appendix A to the Draft EIR are hereby incorporated by reference into this letter. I did not attach new copies to this letter as they already are in the Draft EIR, but they must be treated as part of this comment letter. The City must support its claim by identifying where the Draft EIR addresses each comment in those letters. CEQA requires a good faith, reasoned analysis of the issues raised by a comment; it is not enough to simply repeat the mantra "trust us" and say there will be future studies reviewed by staff. As described above, under these circumstances that approach is legally deficient.

12. "Disagreement Among Experts" Escape Clause Does Not Apply.

The June 19 Staff Report also mentions the CEQA guideline that disagreement among experts does not make an EIR inadequate (page 5). We agree that this rule allows the City to choose which expert to rely on in deciding whether impacts are significant and selecting which mitigations to require. However, it does not apply where there simply is no data to analyze. Here, all the experts agree that more borings and other studies are needed, current descriptions of the landslides are very uncertain, and the mitigations actually needed might be much more severe than recognized in the Draft EIR. CEQA does not allow the City to hide behind the lack of data to say there is no unmitigated impact, nor does it permit deferral of fundamental research needed to truly identify baseline conditions and the magnitude of mitigation required. 7-19

In fact, there is a risk that actual conditions may result in a significant unavoidable impact, but we cannot even begin to consider that possibility because of the lack of data. The actual landslide condition may be much more serious, and needed excavation, repair and drainage work may be much more extensive than recognized – making the work required technically or economically infeasible. Future studies may confirm Mr. Seidelman's concern

that the project as planned may cause significant landslide or drainage impacts on the downslope neighbors – a situation that the Draft EIR does not even recognize as a possibility. "Disagreement among experts" cannot be used to excuse this failure to study.

Conclusion

This letter highlights defects in the Draft EIR. Attached is a letter by consultant Paul Seidelman critiquing the geotechnical studies done to date, the conclusions relied on by the EIR, and the proposed mitigation measures. His analysis provides further support for our argument that more borings and other investigations are needed now, before completion of the EIR. Mr. Seidelman also notes that the technical standards used in the EIR were faulty – a problem that Mr. Kropp also recognized – making those conclusions worthless. There is too much uncertainty regarding the actual location of landslide material, the total amount of repair work needed, and the design changes or other mitigation measures required to ensure the safety of project residents and their neighbors. CEQA does not allow the City to defer those studies and rely on future administrative reviews in this situation, without an opportunity for public scrutiny.

We look forward to reading the City's detailed responses to the comments in this letter, the new letter from Paul Seidelman, and the previous correspondence in Appendix A of the Draft EIR. We also hope to see the results of new geotechnical and drainage tests and analyses performed to make the EIR legally adequate. I anticipate that the results of this work will lead to recirculation of a new, more complete draft EIR that does not attempt to rely on the 1988 report.

Very truly yours,

ARCHER NORRIS

Edward L. Shaffer

ELS/oev
encl. Letter from Paul Seidelman

cc: Peter and Susan Colby, 4109 Happy Valley Road
Peter and Martha Clark, 4103 Happy Valley Road
Walter and Virginia Price, 4115 Happy Valley Road
Steven and Rochelle Klein, 4107 Happy Valley Road
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July 14, 2008

Soares Lane Homeowners
c/o Ed Shaffer
Via email: eshaffer@archernorris.com

RE: Review of Draft Supplement to EIR

Dear Homeowners:

At your request, we have completed an additional review of the geotechnical considerations related to the proposed development of Minor Subdivision MS-504-87. The document was prepared by the City of Lafayette in June, 2008. As you know, I appeared before the Planning Commission and, in the brief time allotted, raised some of my more significant findings, but in the time provided, it is only possible to briefly touch on the numerous deficiencies present in the geotechnical work developed in regards to the proposed project.

My review has found serious omissions in both the development of information and its presentation in the EIR statement. Following, are the major omissions and disputed analyses.

Inadequate Map Delineation of Landslides

There remains no appropriate landslide map showing the nature and extent of landslides that affect the parcel. Absent this kind of map, it is impossible for the reviewer to understand the extent and seriousness of landslide problems at the site. Appropriate landslide maps include the morphologic parts of the slide i.e., the scarp, the slide mass body and the nature of the failure (debris, flow, debris torrent, debris slide, translated mass, rotational slump, deep-seated bedrock movement). Instead, what are presented are some amoebic shaped, outlined areas with no information. The outlined areas do not show the extent of the slides, as the delineation stops at the property line and fails to show that the most significant landslides cross the property line and underlie the Soares Lane properties to the south. This is true of Parcels A and C. 7-20

Complete landslide delineation is a highly relevant aspect of the landsliding in the project area. Modification of these slopes, landslides, and ground water associated with the development of this subdivision, will impact offsite geotechnical conditions. Those potential impacts are not mentioned in any of the text of the EIR. It is as if the subdivision were an island, disconnected geologically from the adjacent down slope properties. I have been reviewing EIRs for the Federal Government, for the State of California, for Cities and Counties and Special Districts for some 35 years, and I have seldom seen such glaring omissions. The reality is that these slides, scheduled for alteration, have not been properly delineated, have not received a proper stability analyses and there is no discussion of the fact that the lower reaches of these slides already have existing homes developed upon them. It seems highly relevant that the EIR discuss these facts. 7-21

In my discussions with Mitch Wolf (Cal Engineering and Geology) and Alan Kropp (Alan Kropp & Associates), there is general agreement that the large landslide beneath Parcel C extends southward to Soares Lane and underlies the existing residence of Mr. and Mrs. Johanssen. I can find no information concerning this anywhere in the EIR. However, the EIR claims to present the findings of a slope stability analysis concerning this landslide. The slope stability analysis discussed on Page 53 of the Supplemental EIR indicates the analysis was conducted using a value of cohesion of 600 to 1200 lbs per square foot (not shown in the EIR, but shown in the supporting report), and an 18 degree angle of internal friction. These values are inappropriate and, in my discussions with the City's geotechnical expert, there was agreement that the values of C and Phi are totally out of normally accepted ranges for this area. More appropriate values for cohesion would be 0 to 100 lbs and for friction of 12 to 16 degrees. Additionally, the analyses in the PRA report includes none of their assumptions regarding ground water conditions employed in the analysis. Finally, there is no cross-section indicating the profile of the landslide that was used to model the stability analysis. The reviewer has no way of knowing whether or not the entire slide was analyzed or just a portion of the slide, yet this data is presented in the report as indicative of the safety of the proposed work and mitigative of the stated potential impacts. If only a portion of the slide was analyzed, then the toe of the slide will remain loaded. If the repair is a buttress, then it will be necessary to alter the repair soils with a reinforced earth structure. Again, we have no idea what the project will involve and therefore, have no way of knowing whether these alterations will adversely influence the offsite portion of the slide. 7-22

Selection of the House Site

The present tentative map shows a house site on Parcel C, but does not contain any discussion of the potential for this area to be underlain by unstable land. We are also told that this need not be understood at the preliminary map stage, but can be further refined after a tentative map has been approved. My understanding of CEQA is that on and offsite impacts, both cumulative and direct specific impacts, are to be addressed with sufficient clarity so that the project and its alternative projects can be evaluated by the public and its decision makers. The impacts that require assessment are both onsite and offsite, and they are both segmented and cumulative. In reviewing the present EIR, I cannot determine where the landslides are, how deep the landslides are and what impacts each of the project alternatives will have on the landslides, including the no project alternative. 7-23

During my meetings onsite with geotechnical consultants from Alan Kropp & Associates and Cal Engineering and Geology, there was agreement as to the main and more obvious landslides, including their extensions beneath the parcels to the south. Major questions remain regarding the knoll area, presently shown as the house site on Parcel C. If the reader examines Figure 7, Page 61 of the Supplemental EIR, you will note the extreme steep slope immediately west of Parcel C, and the marked reduction in slope present in the proposed house site on Parcel C. There are two equally valid geologic processes that might be responsible for the creation of this topographic condition. The first is differential erosion of soil and bedrock based on a change in lithology or soil erodability. Thus, over time, the harder, more resistant material stands quite steep and the softer, more erodable material can form a bench at lower slopes. The second alternative is the creation of the bench by a translation of bedrock along a failure plane. This configuration is generally referred to as a translational slide mass involving bedrock material. It is very difficult to analyze this situation based on small diameter bore hole data. Even if continuous coring is undertaken, it is still no better than a 50/50 chance that a failure plane present will be identified in the corings. The determination of which process formed the bench is absolutely determinative of what land use can be made of the bench. For nearly a year, I have been advocating the use of a large diameter down hole log for the purpose of evaluating the 7-24

nature of this geomorphic feature. In my opinion, the trench work and borings developed in this area are totally unconvincing as to the genesis of this geologic feature. This point of view was transmitted to ERA and was shared by Mitch Wolf and Alan Kropp. PRA disregarded the advice and installed additional rotary wash borings; one of which discovered a heretofore unknown failure surface 38 feet deep. This is the sole basis for determining the extension shape of the landslide underlying Parcel C and the Soares Lane parcel to the south. None of the other trenches or borings revealed failure surfaces. This is not because they are absent; it just means they were not visible in the borings. The geomorphic landforms clearly show extensive and complex sliding beneath Parcel C, the extent of which cannot be reliably understood without large diameter borings. This is the reason why Alan Kropp has indicated a potential for the amount of landslide repair may have to be extended based on discoveries during construction. His estimates nearly double the present estimated excavations. In our opinion, these are large enough impacts and changes to warrant analyses at the EIR phase. The EIR should at least determine if the house site is stable or will require massive grading. 7-24

Alteration of Ground Water

Construction on Parcel C may require some combination of landslide repair and/or ground water modification. Changes in ground water were not discussed as a part of the slope stability analyses presented in the EIR, so the reader has no understanding of what those changes are and how they may impact offsite properties. De-watering that effects the offsite properties may cause settlement and differential settlement beneath the homes adjoining the subdivision to the south. Furthermore, disposal of ground water may be difficult to achieve without pumping. If pumping is to be employed, there is no discussion of backup systems or the adverse effects of pump failure. 7-25

Summary

In summary, the Supplemental EIR is inadequate because:

- The landslide map is inaccurate.
- The indicated house site is not properly evaluated as the sub-surface investigative technique employed is not reliable in locating sub-surface landslide failure planes in soil or bedrock.
- The four additional rotary wash, small diameter borings provided some valuable data but are inconclusive for the complete delineation of landslides, especially at the indicated house site.
- The report fails to discuss offsite impacts created by modification of the landslides and ground water conditions onsite.
- The landslide stability analyses utilized soil strength parameters that are inappropriate for use on this landslide, and failed to discuss ground water conditions for which the safety factor was presented. It also fails to discuss whether or not the entire slide was included in the stability analyses.
- The water discharge from the landslides, as well as surface water collection and discharge, is not related in any way to the capability of the channel to carry the additional run-off, and the report does not discuss the level of protection for each of the commonly discussed storm periods. There was objection at the Planning Commission meeting for use of the 100 year storm as a standard; however, in the context of landslides and a creek, for which the City is already receiving complaints about bank instability, there should be a discussion of the various storm runoff conditions and their on and offsite impacts. 7-26

- Both of the debris flow landslides above the road extend into the scenic easement. The report fails to discuss how grading in the scenic easement will be completed, in terms of how much land area will be disturbed; what will it look like when it is completed; and if it is not going to be disturbed, what impact will the debris slides have on the roadway? 7-27

The mitigation involving buttressing the road and moving the building site on Parcel C is not known one way, or another, to be feasible. The above discussion of the erosional, or landslide created knoll, addresses this point. Thus, the proposal is not evaluated properly one way, or another. The downhill residents will be left, at best, in the same condition they are presently in, and, at worst, they'll be more vulnerable to landslide damage, depending upon the specifics of the project. The point is the EIR contains insufficient information to analyze this or any other alternative involving home construction on the slide or on the knoll to the southwest of the slide.

We hope this has provided you with our current understanding of the geotechnical state of the EIR document. Should you have any questions, please do not hesitate to give me a call.

Sincerely,

SEIDELMAN ASSOCIATES

Paul Seidelman
Principal Engineer
RCE 29683
GE 761
Certified Engineering Geologist 1086

Comment #7 Archer-Norris/Edward Shaffer, July 14, 2008

7-1 The comment incorrectly states that certification of an EIR has no legal significance. Once the 1988 EIR was certified, the City could require subsequent environmental review only if the circumstances in section 21166 of the Public Resources Code and section 15162 of the State CEQA Guidelines justified such additional review. As explained in the SEIR, the City determined that subsequent review was justified, and so the SEIR was prepared in order to update the analysis in the 1988 EIR to address changes in the project and the project's circumstances. See Master Response 9.5.1. for additional explanation regarding the certification of the 1988 EIR.

7-2 The comment suggests that the SEIR should list every aspect of the 1988 EIR that is being relied upon. CEQA does not require what the comment suggests. The SEIR has been prepared to supplement the analysis in the 1988 EIR.

7-3 The NOP correctly described the purpose of the SEIR. Additionally, Chapter 1 of the SEIR described in detail the project's background, the 1988 EIR, and the purpose of the SEIR. Though not required to do so, the City circulated a copy of the 1988 EIR along with the SEIR in order to ensure that the public had full opportunity to review both documents. Because the status of both documents has been explained in detail, no further notice is required.

7-4 The comment incorrectly states that the SEIR misuses the 1988 EIR. The comment also mischaracterizes the information in the SEIR. Page 60 of the SEIR states the performance standard that applies to the final drainage studies that will be submitted with the final subdivision map. Specifically, to ensure that possible changes in the hydrology of the site since 1988 do not allow for increased run-off from the site, the final drainage and hydrology plans must demonstrate no increase in runoff as compared to 1988 conditions. The purpose of this performance standard is not to ignore changed conditions, as the comment suggests; rather, the purpose is to ensure that final drainage design conforms to the conditions described in the 1988 EIR. The comment also asks whether a statement about pre-existing conditions refers to conditions before the project is built or conditions before the project was proposed in 1987. The statement refers to the latter conditions. Because the context of the statement ensures clarity, and the statement is confirmed in this response to comment, no revision of the EIR is required.

7-5 The comment states that it is inappropriate to rely on a 1988 baseline. The comment does not provide any comment as to the analysis in the SEIR, however, so no further response is required.

7-6 Based on his past experience with these types of landslide repairs, Mitchell Wolfe, P.G., C.E.G., Principal Geologist of Cal Engineering & Geology, Inc. indicated that grading contractors seldom remove all of the slide debris to a stock pile area and then haul it back as suggested by the commenter. Most grading contractors will stage their

operation to minimize the number of times that the soil has to be handled, as each time the dirt is moved, costs increase correspondingly. As stated in the Draft SEIR (pp. 53-54), the grading operation would proceed in stages. Stage one would consist of excavating the soil from half of the keyway area and off hauling it to the stock pile area. Once the keyway drain system has been completed, the contractor would then start stage two, which would consist of excavating the second half of the keyway. However, instead of off hauling the soil from the second stage to the stock pile areas, the fill used to backfill the keyway would be generated from the portion of the landslide directly above the existing keyway excavation (stage 1). This would have the benefit of minimizing the distance that the soil would have to be moved. Once the excavation for stage 2 is completed and the sub drains are installed, the contractor would start to work on stage 3 which would consist of making another excavation and using that dirt to fill the stage 2 excavation. Using this methodology, the contractor would work his way up through the slide area. Near the end of the grading operation the soil in the stockpile area would be brought back and placed as engineered fill. If it is conservatively estimated that the entire keyway excavation would consist of about one third of the total volume of the slide repair or 26,330 cubic yards (63,500/3 = 21,166), then half of that volume would be moved to the stock pile area (21,166/2=10,583 cubic yards).

The comment also incorrectly states that the potential impacts of remedial work were not analyzed in the SEIR. Traffic issues related to remedial earthwork were addressed at page 46 of the SEIR, air quality at pages 77-78, and noise at pages 79-80. No evidence suggests that any of those impacts from construction will be significant.

7-7 The comment raises concern regarding air quality emissions that may occur during construction. The Draft SEIR's analysis of construction air quality impacts is consistent with the Bay Area Air Quality Management District's CEQA Guidelines. The City has discretion to rely on the guidance of the expert air quality agency in making its determination regarding the significance of the potential impacts.

7-8 See Draft SEIR, Appendix D-5, Figure SP-1. The area specified for stockpiling is 470' x 82' x 15' high and capable of holding 21,411 cubic yards. Figure 4-B of the Draft SEIR, shows a more specific location able to hold 24,400 cubic yards which is more than adequate to accommodate the cubic yards identified as part of the phased remedial earthwork. Also see Response 7-6.

7-9 This comment notes several issues with the temporary stockpile area to be used in during remedial earthwork. As shown in Figure 4-B there is currently no setback from the northern property line for the stockpile. Potential impacts to adjoining property owners from this stockpile area are discussed in Section 3.2.3 of the Draft SEIR (p. 55, par. 1). Mitigation measure 11, which requires that the stockpile area be setback at least 25 feet from the nearest residence, is proposed to reduce potential impacts to a less than significant level. Compliance with this mitigation measure will be reflected in the subdivision improvement plans and monitored in the field.

Mitigation measure 11 also requires that the stockpile area be limited to grassland areas. To further insure that no coastal scrub or trees, including a non-native plum tree are impacted by use of the stockpile area, mitigation measure 11 has been modified. Refer to Chapter 10 for revision to mitigation measure 11.

7-10 See Responses 7-6 and 7-8. Potential impacts from project construction including remedial repair are discussed in the Air Quality and Noise sections of Chapter 3 of the Draft SEIR (pp. 77-80). Additionally, mitigation measure 10 requires preparation of an Erosion Control Plan which will ensure that dust and erosion issues will not affect neighbors.

7-11 The noise impacts of cumulative development within the City has been analyzed in the General Plan EIR, which is incorporated by reference herein. Additionally, remedial earthwork and home construction on the individual parcels may result in temporary construction impacts related to noise and groundborne vibration. Groundborne noise and other types of construction-related noise impacts would be created by the operation of heavy equipment such as trucks, backhoes, bulldozers, excavators, front-end loaders, compactors and scrapers.

Chapter 5.2, Noise, Lafayette Municipal Code, contains provisions governing the hours during which construction activities may occur, as well as noise-level performance standards that construction machinery must satisfy. (See Appendix K) Specifically, Section 5-208(d) states:

> Construction and Maintenance. Notwithstanding any other provision of this chapter, between the hours of eight a.m. and eight p.m. on weekdays and between the hours of ten a.m. and six p.m. on Sundays and holidays, construction, alteration and repair activities which are authorized by a valid city permit; and maintenance activities such as lawn mowing, rotovating, tree trimming and painting, which require no city permit (but not including the operation of stationary, installed equipment, such as swimming pool and air-conditioning motors and devices), shall be allowed if they meet at least one of the following noise limitations:
>
> (1) No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 50 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible.
> (2) The noise level at the nearest affected property shall not exceed 80 dBA.

Compliance with the provisions of Chapter 5.2 and standard conditions of approval such as the two listed below will ensure that potential construction-related noise impacts will be less than significant without any additional mitigation measures:

- Plans submitted for grading and building permits shall include the following noise standards copied onto the plans:
  a. Site improvement and construction work, including setup, loading or unloading of materials and equipment, and/or the maintenance, refueling or tune-up of any equipment shall be restricted to the hours of 8:00 a.m. to 6:00 p.m., Monday through Saturday. No construction shall occur on Sundays or federal holidays.
  b. All construction equipment powered by internal combustion engines shall be properly maintained and muffled to reduce noise levels to the maximum extent feasible.
  c. Unnecessary idling of internal combustion engines near existing noise sensitive receptors shall be prohibited.
  d. Stationary equipment shall be located as far away from residences as feasible, but in no case shall be closer than 40 feet to any property line or exceed 70 dBA at 50 feet. Non-stationary mobile equipment shall not exceed 83 dBA at 50 feet.

- Prior to start of grading or construction, whichever occurs first, a sign stating the allowed days and hours for construction shall be posted in a conspicuous place on the property where it can be viewed by all contractors, subcontractors, and the general public. The sign shall be no smaller than 2 square feet or larger than 4 square feet with lettering between 3 inches and 5 inches in height. The construction sign shall state, "Hours of construction, Monday - Saturday, 8:00 A.M. to 6:00 P.M. No construction shall occur on Sundays or federal holidays." Violation of this condition may result in issuance of a Stop Work Order or administrative citations.

Thus, no additional analysis is required in response to this comment.

7-12 See Master Response 9.3.5b.

7-13 Refer to Response 2-21 regarding alternate suggested home sites. As noted in that Response, the proposed alternative location would fail to satisfy a key project objective, and is therefore infeasible. As stated in the alternative, a homesite for Parcel C would be located west of the road. The homesite would be located north of the open space easement so the road would no longer need to cross the large landslide at the south end of the property and no longer need to be repaired. Drainage improvements would not be needed in the southern portion of the property because no development would occur there. Figure 4-B in the Draft SEIR indicates that road drainage would be channeled through a grassy swale. Drainage from a homesite in this location could also be channeled through this swale; however, CEQA does not require the analysis of alternatives to include the same amount of detail that is provided for the proposed project so a drainage scheme is not necessary. Given the above, the analysis of alternatives in the SEIR is adequate, and no further analysis is required.

7-14 See Response 5-1.

7-15 The homesites will not be part of the final map. The tentative map has been revised to show their removal although they are still shown on figures 4-A, 4-B, and 4-C. See Chapter 10, Figure 3. The homesites were for illustrative purposes only to show that each proposed lot is capable of providing a 15,000 square foot building site of 30 percent or less slope in compliance with section 6-2047, LMC. Parcels A and C are more than twice the size required by the R-40 zoning district; Parcel B is 13 times the required size. Each parcel is of sufficient size to provide adequately for a house and accessory buildings outside required yard and creek setbacks. The geotechnical studies are only necessary to confirm and substantiate the final design of the repair work.

7-16 The commenter misidentifies the potential impact mitigation measure 8 is meant to address. Mitigation measure 8 requires the applicant to conduct an on-site investigation to determine if an existing off-site landslide will have an impact on the development of Parcel A. Mitigation measure 8 is originally from the 1988 FEIR and based on the assumption that the landslide north of and underlying Happy Valley Road extends into the eastern portion of Parcel A. Based on the updated geotechnical studies and peer review by Kropp & Associates, a landslide feature is not likely present at this location. The test pits did not identify slide debris, and if present, this slide would likely be a shallow feature exhibiting clear indications of slide debris. [Kropp, April 26, 2007, pg. 3] It should also be noted, that when this mitigation measure was formulated, the building site for Parcel A was located in the eastern portion of the parcel and has now been moved farther west. In the unlikely event that a landslide feature is present on Parcel A and impacts the development of Parcel A, then it will have to be repaired. Mitigation measure 8 does not require the applicant to analyze or repair any off-site landslides which may have the potential to impact Happy Valley Road.

7-17 See Response 2-37 and Appendix H.

7-18 Letters submitted during the NOP process are included as Comment #2. See master responses 9.5.3a and 9.5.3b, responses 1-1 through 1-9, responses 2-1 through 2-41 and Draft SEIR: Chapter 5; sections 1.2, 3.2.3, 2.5, 4.2; p. 50, par. 1 and 3-6; pp. 52-55; pp. 53, par. 5; pp. 59-65; p. 63, par. 4, 5; pp. 65-67; p. 71, par. 3; pp. 77-80; Figure 4-C; Appendix D-6; and appendices E-1, E-2, and E-3.

7-19 See master responses 9.5.3a, 9.5.3b, 9.5.4, and Response 4-1. Over 20 points of penetration were used to identify the vertical and lateral extent of the landslide feature. This level of effort is sufficient to complete a stability analysis of the proposed slide repair system. The comment incorrectly states that the mitigation measures may be more severe than recognized in the SEIR. The SEIR analyzed a worst case scenario of remediating the entire slide on the project site.

7-20 Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features. See Chapter 10.

7-21 See master responses 9.5.3a and 9.5.3b and responses 1-2 and 1-5.

7-22 See master responses 9.5.3a and 9.5.3b and responses 1-2, 1-5, and 2-4. Additionally, Alan Kropp has stated that if the remaining slide material is removed to the property line, that should adequately constrain those slide materials from moving any farther onto the downslope properties (See comment #5, p. 8, lines 38 and 39). As noted in Response 5-1, the on-site portion of the landslide and swale lying east of the road at parcel B/C will be completely repaired through excavation and compaction.

Figures 4-A, 4-B, and 4-C have been revised to show the known extent of on-site landslide features. See Chapter 10.

7-23 See Draft SEIR, sections 3.2.3 and 5.2 and responses 3-1, 5-1, 5-3, 6-2, 7-8, 7-13, 7-19, 7-20, 7-22, and 7-23.

7-24 The rotary wash borings consisted of two, 5-inch diameter core holes drilled to a depth of approximately 80 feet below the existing ground surface for a hole drilled just below the proposed roadway, and approximately 60 feet below the ground surface at the lower area of the site, near the Parcel B and C property lines. The test pits were excavated in order to further evaluate the subsurface conditions in the area of Parcel C. Between 1987 and 2007, over 20 points of penetration were used to identify the vertical and lateral extent of the landslide feature. This level of effort is sufficient to complete a stability analysis of the proposed slide repair system using conventional cut and fill (buttress) grading and appropriate foundation design.

Once a tentative map is approved but prior to final map acceptance by the City, subdivision improvement plans will have to be reviewed and approved by the City Engineering Services Manager. The improvement plans will reflect site specific subsurface investigations and analyses, and will include recommendations and sufficient details to confirm and substantiate the final design and the findings of the Draft SEIR. Also see Master Response 9.5.3a.

See Response 5-1 for the context in which a 50 percent grading volume was discussed.

See Response 7-15 regarding homesite locations. Additionally, the project description has been revised to clarify that the on-site portion of the landslide at the parcel B/C lot line will be excavated west of the road to the extent necessary for the buttress fill to stabilize the road and that all of the on-site landslide complex east of the road will be repaired. (See Chapter 10 for revision of the project description.)

7-25 See Master Response 9.5.3b.

7-26 See Master Response 9.5.3b and responses 2-29, 3-2, 5-2, and 7-12.

7-27 See revised Figure 4-B and Figure 5 for remedial repair within the scenic easement. See mitigation measure 5 in Chapter 10. See mitigation measure 27 which requires submittal of a re-vegetation plan for the areas subject to remedial earthwork.

CHAPTER 10

REVISIONS TO THE DRAFT SEIR

CHAPTER 10 – REVISIONS TO THE DRAFT SEIR

Subsequent to the public release of the Draft SEIR, revisions have been made to the SEIR as a result of staff initiated changes, changes approved by the Planning Commission on July 3, 2008, and comments received prior to certification of the Final SEIR. Those pages with revisions are identified below and follow this list of errata pages.

Page 3	Add Appendix F.3
Pages 8 to 24	Corrections and changes to various mitigation measures
Page 28	Add missing word
Page 33	Clarification of project description
Pages 55 to 57	Change to mitigation measure 5. Mitigation measure 5 has been revised to provide clarification on the intent and anticipated scope of the specific subsurface investigations and analyses to be included in the design-level improvement plans. These revisions do not involve any changes in the City's significance determination but are simply a clarification of the existing analysis and recommended mitigation measure, so recirculation of the SEIR is not required. (*CEQA Guidelines* section 15088.5.) Change to mitigation measure 6. Mitigation measure 6 included measures to reduce impacts from unstable soils to less than significant levels for both the remedial earthwork and subsequent development of Parcel C. This was confusing since mitigation measure 5 addressed the remedial earthwork for landslide repair. The text addressing the remedial earthwork and additional field investigations for design-level plans was moved to mitigation measure 5. Mitigation measure 6 now addresses the need for subsurface testing for all the individual lots and not just Parcel C. These revisions do not involve any changes in the City's significance determination but are simply a clarification of the existing analysis and recommended mitigation measure, so recirculation of the SEIR is not required. (*CEQA Guidelines* section 15088.5.) Change to mitigation measure 7. Reference to mitigation measure 6 has been deleted since mitigation measure 6 applies to studies required at the design review and hillside development application stage for the individual homesites and are not a part of subdivision improvement plans. The revision does not involve any changes in the City's significance determination but is simply a clarification of the

	existing analysis and recommended mitigation measure, so recirculation of the SEIR is not required. (*CEQA Guidelines* section 15088.5.)
Page 58	Change to mitigation measure 11. Mitigation measure 11 requires that the stockpile area be limited to grassland areas. To further insure that no coastal scrub or trees are impacted by use of the stockpile area, a performance standard has been added.
Pages 62 to 63	Change to mitigation measure 12. Mitigation measure 12 has been revised to clarify the requirement that the project drainage system be designed such that project runoff be detained on-site, that it accommodate the 10-year storm event, and that it include surface runoff that may be generated by the subdrain system. The 100-year storm event criteria was carried over to this mitigation measure from the 1988 FEIR which analyzed a denser project. The City Engineer has indicated that the 100-year storm event is excessive for a project of this nature and magnitude particularly since the stormwater design standard in Contra Costa County for projects less than one square mile in size is the 10-year event only. The elimination of the 100-year criteria does not change the City's significance determination, so recirculation of the SEIR is not required. (*CEQA Guidelines* section 15088.5.)
Page 66	Add missing word
Page 89	Add missing word
Figures 4-A, 4-B, and 4-C	These figures have been revised to show the known extent of on-site landslide features.
Appendix A Initial Study p. 10	Correct error in table
Appendix F	Added Appendix F.3

List of Appendices

A 2008 Initial Study, Notice of Preparation, and Public Comments
B Draft Environmental Impact Report and Final Environmental Impact Report for Barsell Subdivision (MS504-87), 1988
C Visual Analysis
D Geotechnical Reports and Peer Reviews
  D.1 Geotechnical Study Update, MS504-87, Purcell, Rhoades & Associates, June 1, 2006
  D.2 Geotechnical Peer Review, Alan Kropp & Associates, April 26, 2007
  D.3 Supplemental Investigations, Purcell, Rhoades & Associates, July 26, 2007
  D.4 Supplemental Geotechnical/Geologic Peer Review, Alan Kropp & Associates, August 2, 2007
  D.5 Response to Kropp Review of 8/2/07, Purcell, Rhoades & Associates, February 9, 2008
  D.6 Supplemental Geotechnical Peer Review, Alan Kropp & Associates, March 19, 2008
E Wildlife Surveys
  E.1 Habitat Suitability for the Possible Occurrence of the Alameda Whipsnake, Beeman & Associates, Biological Consultants, February 28, 2006
  E.2 Wildlife Survey, Beeman & Associates, June 3, 2006
  E.3 Reassessment of Habitat for Previous Surveys and Raptor Nesting Survey, Beeman & Associates, May 2, 2008
F Botanical Surveys
  F.1 Status of Rare Plant Surveys, Dianne Lake, Botanical Consulting January 3, 2006, March 24, 2006, and April 22, 2006
  F.2 Rare Plant Survey, Dianne Lake, April 21, 2008, and May 2008
  F.3 Rare Plant Survey, Dianne Lake, July 11, 2008
G Tree Survey and Arborist Report

Table S-1
Comparison of Former Project Analyzed in the FEIR and Current Project

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Planning and Policy Context Consistent with the FEIR and/or the 2008 Initial Study, the current plan would result in a significant impact if it would:			
Be inconsistent with the General Plan.	No Impact.	No mitigation is required.	No Impact.
Not comply with the Zoning Ordinance.	No Impact.	No mitigation is required.	Less Than Significant.
Not comply with the creek setback ordinance.	Potentially Significant Impact.	Mitigation Measure 1. The City of Lafayette shall verify compliance with the Creek Setback Ordinance through review of plot plans for individual parcels on the project site as part of the City's Design Review and Hillside Development Permit process.	Less Than Significant.
Not comply with the Hillside and Ridgeline Preservation Ordinance.	~~Potentially Significant Impact.~~ No Impact.	~~See Mitigation Measure 1.~~ No mitigation is required.	~~Less Than Significant.~~ No Impact.
Significantly affect development of areas to the north and west (within the City of Orinda).	No Impact.	No mitigation is required.	No Impact.
Traffic and Circulation Consistent with the FEIR and/or the 2008 Initial Study, the current plan would result in a significant impact if it would:			
Result in significant additional vehicle traffic outside the project boundaries.	Potentially Significant Impact.	Mitigation Measure 4: Prior to issuance of a grading or building permit, whichever occurs first, submit a construction traffic control plan to the City Engineering Services Manager for review and approval. The traffic control plan may include limitations on days and hours beyond those normally allowed for construction. The approved construction traffic control plan shall be implemented during all phases of active construction and may be modified by the City Engineering Services Manager as required to ensure that impacts on area traffic and circulation are minimized to the maximum extent feasible.	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		~~Mitigation Measure: The project should be required to pay toward traffic mitigation according to the number of dwelling units constructed. This funding could be applied to the replacement of the existing guardrail on Happy Valley Road north of Soares Lane, and/or to other traffic mitigation projects.~~ *Note: This mitigation measure is no longer necessary. The project is subject to the Lamorinda Sub-Regional Transportation Fee which is used for traffic mitigation projects in the Lamorinda area. The guardrail is being replaced as part of City of Orinda Encroachment Permit No. 06-130.*	
Result in hazardous placement of roadway or roadway/driveway intersections.	Potentially Significant Impact.	Mitigation Measure 2: If not already completed, the improvements to Happy Valley Road pursuant to City of Orinda Encroachment Permit No. 06-130 shall be completed and accepted by the City of Orinda,as part of the subdivision improvements. Recommended signing and pavement markings specified in Mitigation Measure 3 shall be installed prior to acceptance of subdivision improvements or issuance of building permits, whichever occurs first. ~~The alternative access plan to connect to the existing private road in Orinda should be pursued in further detail to determine if it is possible. This would be the preferred alternative in terms of traffic safety. If the alternative access is not feasible, a detailed plan for the new intersection on Happy Valley Road should be developed showing how site distance standards can be met. It may be possible to shift the driveway intersection father north along Happy Valley Road to improve sight distance. Since this intersection is in Orinda City limits, the City of Orinda should also have the opportunity to review and approve this plan.~~	Less Than Significant.
Result in significantly hazardous emergency vehicle access.	No Impact.	No mitigation is required.	No Impact.
Substantially increase hazards due to a design feature or incompatible uses.	Potentially Significant Impact.	Mitigation Measure 3: Roadway improvement plans shall include mitigation of potential hazards at this intersection. Specific recommendations, subject to review and approval by the City of Orinda, include:	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		a. Installation of an advanced curve warning sign and supplemental 20 mph sign facing southbound drivers approaching the curve; b. Installation of a series of chevron arrow warning signs around the curve facing downhill drivers; c. Addition of reflectors to the guard rail; d. Restriping of Happy Valley Road from Sundown Terrace to the Lafayette city limits in addition to what is included in City of Orinda Encroachment Permit No. 06-130. Recommended signing and pavement markings specified above, or other measures imposed by the City of Orinda that in the City of Lafayette's judgment provide the same level of safety precautions, shall be installed prior to acceptance of subdivision improvements or issuance of a building permit, whichever occurs first.	
Geotechnical Considerations Consistent with the FEIR and/or the 2008 Initial Study, the current plan would result in a significant impact if it would:			
Result in construction of facilities in a known landslide area or expose people or structures to potential substantial adverse effects involving landslides.	Potentially Significant Impact.	Mitigation Measure 5. The two ~~active~~ landslides on the site shall be repaired. These slides can be repaired by conventional removal and recompaction operations. ~~This would involve removing all landslide debris, excavating into the bedrock below the landslide, installing subsurface drainage, placing excavated materials back into the hillside as engineered fill, constructing surface drainage measures, and planting erosion control vegetation. The roadway access to Parcel B in the large landslide area could be developed on the reconstructed landslide area. Similarly, the repair of the smaller landslide would involve removal and recompaction operations.~~ All landslide repairs and remedial grading shall implement the recommendations of the geotechnical engineer, Purcell, Rhoades & Associates, as contained in the Geotechnical Study Update, June 1, 2006 and Supplemental Investigation Report, July 26, 2007, or as amended by the City Engineering Services Manager. At the discretion of the Engineering Services Manager and his consultant(s), additional field investigation and analysis may need to be conducted to determine the final depth of	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		remedial earthwork. The additional field investigations may include large diameter, downhole logged borings. The scope of design-level plans and location of subsurface testing and related investigations shall be coordinated with the City Engineering Services Manager. Design-level plans may include cross-sections to coordinate drain bench and subdrain elevations and flow directions. The Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required. Where appropriate, as determined by the City Engineer, improvements and environmental mitigation measures required by the conditions of approval and all other applicable conditions of approval shall be incorporated into improvement plans. Prior to submittal of grading and improvement plans to the City Engineering Services Manager for review and approval, the plans shall be reviewed by the project geotechnical engineer to ensure that the recommendations and specifications have been included. Plans shall include the re-establishment, as feasible, of topographic contours as they existed prior to remedial earthwork. ~~It is recommended that additional field and subsurface investigations be conducted to analyze alternative repair scenarios. A possible scenario is to focus on providing a fill buttress for the access road and leave the thick colluvial deposit at the eastern limits of the site (Boring B-2) in place. The City Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required.~~ During landslide and soil stabilization work, the project geotechnical engineer or engineering geologist, or their representative, must be present to observe the work performed and to perform whatever testing is necessary to properly evaluate the quality of the materials and their relative compaction and to ensure compliance with approved plans.	

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		~~Mitigation Measure 6: Additional field investigation and analysis shall be conducted for the siting of the building site on Parcel C. These additional field investigations shall provide site specific recommendations for the buttress at Parcel C and will include a design level plan with cross sections to coordinate drain bench and subdrain elevations and flow directions. The scope and location of subsurface testing and related investigations shall be coordinated with the City Engineering Services Manager. Subsequent subsurface testing and related reports shall be subject to review and approval by the City Engineering Services Manager.~~ Mitigation Measure 6: Prior to submittal of design review and hillside development permit applications for the individual homesites, design-level subsurface testing and investigations shall be conducted to determine design parameters for house foundations and improvements. The scope and location of subsurface testing and related investigations shall be coordinated with the City Engineering Services Manager. Subsequent subsurface testing and related reports shall be subject to review and approval by the City Engineering Services Manager. Mitigation Measure 7: Prior to final map approval by the City, the applicant shall submit detailed improvement and civil plans per the City Engineer's requirements. Said plan shall be prepared by a registered civil engineer. All public improvements shall be designed to City of Lafayette standards and to accepted engineering design standards. The City Engineer has all such standards on file and the Engineer's decision shall be final regarding the specific standards that shall apply. Where appropriate, as determined by the City Engineer, improvements and environmental mitigation measures required by the conditions of approval and all other applicable conditions of approval shall be incorporated into improvement plans. ~~In conjunction with Mitigation Measure 6, d~~Design-level subsurface testing and investigations shall be conducted. The scope	

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		and location of subsurface testing and related investigations shall be coordinated with the City Engineer. Subsequent subsurface testing and related reports shall be subject to review and approval by the City Engineer. The City Engineer shall have final discretion in determining the scope and nature of any and all remedial work required. ~~Mitigation Measure: The proposed Parcel A homesite should be shifted to the southwestern corner of the parcel, and access to the parcel should be provided via the proposed roadway off Happy Valley Road, rather than via a driveway easement to Soares Lane.~~ *Note: The project has been redesigned to incorporate this mitigation measure and it is no longer necessary.* Mitigation Measure 8: The project applicant shall conduct an investigation of the existing landslide underlying Happy Valley Road in the northeastern corner of the project site. The study should determine the extent to which the proposed project would affect landslide activity in this area, and identify any necessary repairs required by project impacts. The results of this study shall be reflected in the plans to be reviewed by the project geotechnical engineer, prior to review and approval by the City Engineering Services Manager. The Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required. *Note: This mitigation measure has been revised to ensure that the project applicant is responsible for repairs of any project impacts.*	
Result in significant changes in topography.	Potentially Significant Impact.	See Mitigation Measures ~~7~~ 5, 26 and 27.	Less Than Significant.
Result in creation of significant unstable earth conditions or expose people or structures to potential substantial adverse effects involving unstable soil or geologic unit or that would become unstable as	Potentially Significant Impact.	See Mitigation Measures 6, 7, and 8. Mitigation Measure 9: The expansive soils in the area will have future shrink and swell characteristics. All house foundations and super-structures should be carefully designed by an experienced structural engineer. Particular care should be given to connections, hold-downs, and reinforcement aspects of the house design. All house foundations should consist of drilled piers	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
a result of the project.		which are extended well into the bedrock underlying the surficial soils. The piers should be interconnected, designed to resist lateral creep forces, and contain voids below the grade beams. Retaining walls should also be designed for relatively high creep forces. The roadway designs should also take into consideration the uplift forces from the expansive soils. It is likely that a thick layer of non-expansive imported materials would be needed to help provide stability to the roadway section. Imported material would also likely be needed under any slab-on-grade improvements, walkways, or patios in the building areas. Proper surface drainage measures around the proposed homes would also help to minimize danger from expansive soils. Such measures would include collection of gutter downspouts to discharge pipes, collection of water on paved surfaces, and collection of water on the uphill side of the homes. Prior to issuance of a building permit, the applicant shall submit plans to the City Engineering Services Manager for review and approval. The plans shall demonstrate that the foundation design for the proposed structures, access road, and retaining walls have included the recommendations contained in the Geotechnical Study Update, June 1, 2006 or as amended by the City Engineering Services Manager. Prior to submittal to the City Engineering Services Manager for review and approval, the plans shall be reviewed by the project geotechnical engineer to ensure that the recommendations and specifications have been included.	
Result in significant erosion or siltation problems or expose people or structures to potential substantial adverse effects involving substantial soil erosion or the loss of topsoil.	Potentially Significant Impact.	Mitigation Measure 10: ~~Erosion in the graded areas shall be minimized by proper planting of vegetative materials and placement of erosion control fabrics. Care should be taken in the selection of seed varieties, the time of placement of these materials, the mulching components, and any fabrics used. A landscape architect experienced in erosion control stabilization measures shall be retained to work with the design civil engineer in establishing the proper erosion control measures in graded areas. Silt fences and other retention devices should be installed at the lower ends of any graded areas to minimize the likelihood of eroded materials passing on to downslope properties or clogging improvements.~~ Prior	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		to Improvement Plan approval or issuance of a grading permit, whichever occurs first, the applicant shall prepare and submit a detailed erosion control plan (ECP) to the city Engineering Services Manager for review and approval. The purpose of the ECP shall be to mitigate erosion and sedimentation impacts during construction. At a minimum, the ECP shall include the following: a. A proposed schedule of grading activities, monitoring, and infrastructure milestones in chronological format; b. Identification of critical areas of high erodibility potential and/or unstable slopes; c. Contour and spot elevations indicating runoff patterns before and after grading; d. Identification of erosion control measures on slopes, lots and streets. Measures shall be based on recommendations contained in the "Erosion and Sediment Control Field Manual" published by the San Francisco Regional Water Quality Control Board (RWQCB); e. Utilization of soil stabilization techniques such as short-term biodegradable erosion control blankets and hydroseeding; f. Retention of a landscape architect experienced in erosion control stabilization measures to work with the design civil engineer in establishing the proper erosion control measures in graded areas; and g. Post-construction inspection of all drainage facilities for accumulated sediment, and the cleaning of these drainage structures of debris and sediment. The ECP shall be described in the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project. Mitigation Measure 11. To minimize impacts to neighboring properties and existing vegetation, the stockpile area shall be at least 25 feet from the nearest residence and be limited to the grassland area. Prior to final map approval or issuance of a grading permit, a plan showing a stockpile location	

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		meeting these criteria shall be submitted to the Planning Services Division for review and approval. No equipment, construction materials or dirt shall be placed within the dripline of any trees or within northern coastal scrub habitat. Prior to issuance of a grading or building permit, whichever occurs first, six-foot high fencing shall be installed to protect the northern coastal scrub habitat and adjacent trees. Placement of protective fencing shall be supervised in the field by the botanical consultant.	
Storm Drainage and Runoff Consistent with the FEIR and/or the 2008 Initial Study, the current plan would result in a significant impact if it would:			
Significantly change drainage patterns or the rate and amount of surface water runoff.	Potentially Significant Impact.	Mitigation Measure 12: The City shall review and approve ~~both~~ the project drainage plan ~~and the area wide drainage system~~ to determine ~~their~~ its adequacy to accommodate the 10~~0~~-year event. Where practical, the subdrain system and discharge into the on-site drainage system. The stormwater control plan shall meet the requirements of the City's stormwater pollution prevention plan and the Contra Costa County Clean Water Program. Prior to approval of an improvement plan or issuance of a grading permit, whichever occurs first, the applicant shall submit to the City Engineering Services Manager a final hydrology and hydraulic analysis of the existing storm drain system to its discharge to Happy Valley Creek. ~~junction with Upper Happy Valley Road to demonstrate the storm drain system's ability to accommodate the 100-year storm event. Any deficiencies shall be corrected as depicted in the final hydrology and hydraulic analysis to be approved by the City Engineering Services Manager.~~ The final hydrology and hydraulic analysis shall demonstrate, to the satisfaction of the City Engineering Services Manager, that the project meets the following performance criteria including but not limited to: a. Post-project peak run-off has been detained/retained onsite, and b. That detention systems have been constructed to handle adequately the 10-	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		~~and 100-~~year storm runoff from buildout of the site. If the systems are determined to be inadequately sized, the systems shall be expanded to provide for adequate detention and to maintain peak discharge at or below the discharge/runoff conditions documented in the FEIR. Mitigation Measure 13: The drainage plan for Parcel C shall direct runoff to Happy Valley Creek and away from existing residences to the northeast. Mitigation Measure 14: Maximum use of on-site stormwater detention should be incorporated into the project where possible through appropriate design of drainage facilities. Mitigation Measure 15: Prior to issuance of a building permit for home construction, the applicant shall pay the required Drainage Study Fee pursuant to Chapter 8-17, Lafayette Municipal Code ~~contribute a drainage fee to the City of Lafayette for drainage study purposes~~. ~~Mitigation Measure: The maximum capacity of the 48-inch culvert should be maintained by careful and selective clearing of the creek immediately upstream and downstream of the culvert. Rock protection for the creek banks and Soares Lane are also recommended to minimize the potential for erosion during high flows, overtopping of the culvert, and damage to the roadway.~~ *Note: This mitigation measure cannot be legally imposed pursuant to section 15126.4(a)(5) of the CEQA Guidelines and should be eliminated. The culvert and creek are located on private property not under control of the applicants and this mitigation measure cannot be legally imposed. Regardless of whether or not this project is approved, it is the duty of the affected property owner to maintain the creek in a manner that does not create a public nuisance such as flooding from accumulation of debris or trash. On a case by case basis, the City can request that creeks and drainages to be cleared of accumulated debris and trash by declaring a public nuisance. Even if this mitigation*	

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		measure could be legally imposed, it would not be necessary as the proposed on-site drainage system will achieve post-development peak flows to the downstream drainage systems that are equal to or less than the existing peak flows. ~~Mitigation Measure: Adequate mitigation of drainage impacts from the development on Parcel A could be made by rerouting the runoff from the site. The two existing drainage ditch and conduit systems could be utilized to some extent; however, they should not be relied upon to accommodate all of the runoff. A proper drainage plan for Parcel A might include intercepting a portion of the runoff and conveying it to the north of the two existing ditches. This could be accomplished by intercepting surface runoff from Happy Valley Road, e.g. by installing a berm on Happy Valley Road and directing the drainage into a closed pipe system. The alignment of the closed pipe could follow the proposed 25 foot wide driveway easement to Soares Lane. At Soares Lane, this flow should be directed into a closed conduit and discharged directly into Happy Valley Creek. Alternatively, the closed pipe system could be located in Happy Valley Road. Offsite public drainage easements would be required downstream of Soares Lane. These drainage easements should be acquired by the applicant prior to tentative subdivision map approval.~~ *Note: This mitigation measure is no longer necessary as written. The current plan includes an on-site stormwater drainage system which must comply with Mitigation Measure 12.* ~~Mitigation Measure: If and when development on Parcel D is proposed, appropriate drainage plans should be developed to convey stormwater runoff into the existing drainage system. This may include the use of paved drainage ditches, bank protection, closed conduits, and other measures to protect properties adjacent to the northern project boundary.~~ *Note: This mitigation measure is no longer necessary as written. The current plan includes an on-site stormwater drainage system which must comply with Mitigation Measure 12.*	

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Violate any water quality standards or waste discharge requirements.	Potentially Significant Impact.	Mitigation Measure 16: The applicant's drainage plan shall include the use of temporary facilities to divert or control runoff during construction to avoid the possibility of uncontrolled erosion during or following construction. Other long-term and permanent erosion control methods include landscaping and the selective use of drainage swales and subdrains. All such erosion control measures shall be described in the Storm Water Pollution Prevention Plan prepared for the project. Hydroseeding for remedial earthwork and erosion control shall use a native grassland mix appropriate for this hillside location. Mitigation Measure 17: Prior to issuance of grading or building permits, whichever occurs first, the applicant shall comply with NPDES General Construction Activities Storm Water Permit Requirements established by the CWA including preparation of a SWPPP. The SWPPP shall identify specific types and sources of storm water pollutants, determine the location and nature of potential impacts, and specify appropriate control measures to eliminate any potentially significant impacts to receiving water quality from storm water runoff. In addition to complying with the standards established by the CWA for preparation of a SWPPP, the SWPPP shall also comply with the directions for preparing a SWPPP contained in the latest edition of the Guidelines for Construction Projects published by the California Regional Water Quality Board San Francisco Region. Mitigation Measure 18. Prior to issuance of grading or building permits, whichever occurs first, the project sponsor shall submit to the City Engineering Services Manager a copy of the Notice of Intent (NOI) and SWPPP sent to the State Water Resources Control Board.	Less Than Significant.
Substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site.	Potentially Significant Impact.	See Mitigation Measures 16, 17, and 18.	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	~~Potentially Significant Impact.~~ No Impact.	~~Mitigation Measure: Repair or replacement of the culvert at the Upper Happy Valley Road should involve the applicant. Mitigation could include a payment of a fee proportional to the project's impacts.~~ *Note: This mitigation measure is no longer necessary since there will be no downstream impacts from the project. The current plan includes an on-site drainage system designed to achieve post-development peak flows to the downstream drainage systems that are equal to or less than the existing peak flows.* ~~Mitigation Measure: The applicant should agree to join an assessment district for drainage purposes, if such district is created. If any downstream drainage districts are formed, the applicant shall contribute funds for channel improvements proportional to the project's impacts.~~ *See Note, above.*	~~Less Than Significant.~~ No Impact.
Biologic and Habitat Considerations Consistent with the FEIR and/or the 2008 Initial Study, the current plan would result in a significant impact if it would:			
Result in a significant change in the diversity or number of species.	Potentially Significant Impact.	Mitigation Measure 23: A preconstruction survey for the California red-legged frog and the Alameda whipsnake shall be conducted of the areas of the project site that would be affected prior to construction. Upon completion of the preconstruction survey, survey results shall be reported to the Planning Services Division. If evidence of these or other special status species is found, the California Department of Fish and Game shall be consulted. Mitigation Measure 24: A preconstruction survey shall be conducted for nesting raptors within 250 feet of any construction area within 21 days of construction. A buffer of a radius of at least 250 feet shall be established between any nesting raptor and construction activity. The project sponsor shall submit plans to the Planning Services Division showing the buffer area and protection measures such as fencing or other measure(s) approved by the City. This buffer shall be maintained until the chicks fledge, unless a biologist experienced with raptor nesting behavior determines that the buffer can be reduced without stressing the nesting raptor.	Less Than Significant.

Environmental Impacts	Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		~~Mitigation Measure: The access road on Parcel C should be routed away from the western edge of Parcel C to avoid potential impacts to the Diablo rock rose population immediately west of the parcel.~~ *Note: This mitigation measure is no longer necessary since the current plan eliminates the road along the western edge of Parcel C.* ~~Mitigation Measure: A survey for the Santa Cruz tarweed should be conducted during its blooming season (September-November) to ascertain its presence or absence.~~ *Note: This mitigation measure is no longer necessary because no evidence of the Santa Cruz tarweed was discovered during blooming season surveys conducted in 2006 and 2008.*	
Result in deterioration to existing fish or wildlife habitat.	Potentially Significant Impact.	Mitigation Measure 19. Any future development on Parcel ~~BD~~ shall be planned for the northeast corner to avoid the more valuable wildlife habitats (oak woodland, coastal scrub, and riparian) to the west and southwest. Mitigation Measure 20: ~~Construction of the access road would disrupt the grassland habitat at the edge of Parcel DB. The one to two acres cut off from the rest of the parcel is covered with weedy non-native vegetation. Thus, the loss of habitat from road construction would be minimal.~~ Disturbance of grassland habitat during access road construction shall be confined to the area east of the proposed road to minimize any damage to more valuable habitats to the west. Mitigation Measure 21: Construction and landscaping on Parcel C shall be carried out with minimum disturbance to oak woodland habitat. Placement of the driveway and house site shall avoid removal of oak woodland, and any lost habitat shall be replaced on an acre-per-acre basis on the parcel and in conformance with Chapter 6-17, Tree Protection, Lafayette Municipal Code. Landscape materials shall consist of only native, drought-tolerant species. Mitigation Measure 22: On-site drainage plans shall be reviewed by the California Department of Fish and Game to determine if a Stream Alteration Agreement is required.	Less Than Significant.

significant effects previously examined may be substantially more severe than shown in the previous EIR.

Although the current project includes new geotechnical information, according to section 15163(a) of the *CEQA Guidelines*, a lead agency may choose to prepare a supplement to an EIR, rather than a subsequent EIR, when:

(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

Section 15163 of the CEQA Guidelines further provides:

(b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
(c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
(d) A supplement to an EIR may be circulated by itself without circulating the previous draft or final EIR.
(e) When the agency decides to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

The City has determined that only minor additions or changes are necessary to make the previous FEIR adequate. Therefore, the City of Lafayette has prepared this Supplement to an EIR (SEIR) to address the current plan which, though for a smaller overall project, now includes more remedial earthwork.

1.2.3 Purpose of the SEIR

According to section 15121 of the *CEQA Guidelines*, an EIR is an informational document that is written to inform public-agency decision-makers and the public of the significant environmental effects of a proposed project. The purpose of this SEIR is to:

- Supplement the analysis of the environmental effects of the project currently in the FEIR;
- Indicate mitigation measures to avoid or minimize the potentially significant environmental effects of the current project; and,
- Identify alternatives to the project that would avoid or substantially lessen the significant effects of the project.

According to section 15163 of the *CEQA Guidelines*, a supplement to an EIR augments a previously certified EIR to the extent necessary to address the conditions described in section 15162 and to examine mitigation and project alternatives accordingly. It is intended to revise the previous EIR through supplementation.

subdivision of Parcel B and want to retain that parcel for their residence. The only changes from the 1992 tentative plan are a slight realignment of the interior access road and conservation easement to better conform to the topography and the shifting of a proposed homesite on Parcel A. The conservation easement has been increased from 259,148 square feet to 259,258 square feet and now includes the riparian vegetation at the upper end of the western drainage. The homesite on Parcel A has been shifted west closer to the interior access road and farther away from the downhill homes on Soares Lane. See Figure 3.

All three lots will have access from an interior 20-foot wide, paved private road. A 310± foot long retaining wall two to three feet high will be required on the east side of the road. A 400± foot long retaining wall two to six feet high will be required on the west side of the road. The private road will provide access to Happy Valley Road, a public road within the City of Orinda. Prior to accessing Happy Valley Road, the access road crosses property owned by Orinda Downs HOA. The applicants have acquired an easement through the Orinda Downs HOA property so there is now direct access between the project site and Happy Valley Road.

The current project now includes the complete repair of two on-site landslides and a swale containing a complex of landslide debris and colluvial deposits. The western portion of the landslide complex at the Parcel B/C lot line, upslope of the access road will be repaired to adequately stabilize the road; All of this landslide and the colluvial soils east of the road will be repaired through excavation and compaction. It is anticipated that remedial earthwork will involve approximately 79,500 cubic yards of soil. The grading operation would proceed in stages, with cyclical placement and removal of an on-site stockpile in the northern portion of Parcel B. This area can accommodate a stockpile of approximately 24,400 cubic yards. The project also now includes ~~provision of~~ an on-site stormwater drainage system and expanded trail easement dedication. See Figure 4.

As noted in their NOP comment letter, EBMUD has identified the northwester portion of Parcel A as the proposed location for the Sunnyside Pumping Plant, a component of EBMUD's Water Treatment and Transmission Improvements Program EIR.

2.4 OBJECTIVES OF AND NEED FOR THE PROJECT

The proposed project has the following objectives as identified by the applicants:

- Construct a single-family home on Parcel B
- Sell parcel A to East Bay Municipal Utility District (EBMUD) for its Sunnyside Pumping Plant, a component of the approved EBMUD Water Treatment and Transmission Improvements Program
- Provide for a secluded, private single-family home with limited off-site view impacts on Parcel C
- Avoid sensitive plant habitat
- Enlarge an existing scenic easement
- Repair on-site landslides and unstable soils
- Provide a public trail easement

equipment access to the keyway. After the keyway was excavated to design grade, the sub-drain system would be installed and then the keyway would be backfilled with engineered fill. The fill used to backfill the keyway would most likely be generated from the portions of the landslide directly above the keyway. In other words the landslide debris (which is basically soil) above the keyway would be placed in the keyway. This soil would be moisture conditioned and then compacted as engineered fill. This process would continue as the engineered fill was brought up through the slide area. Near the end of the grading operation, the stockpiled fill would be brought back and placed in the upper reaches of the excavation. To minimize impacts to neighboring properties and existing vegetation, the stockpile area should be at least 25 feet from the nearest residence and be limited to the grassland area. (See Mitigation Measure 11.)

Seismically induced ground shaking with minor structural damage may occur. This potential impact will be mitigated to less than significant levels by following the recommendations contained in the 2006 Update and adherence to Uniform Building Code standards as provided in the updated Mitigation Measure 5.

In order to reduce the potential for foundation movement due to expansive soils, it is recommended that a pier and grade beam foundation be utilized to derive support and uplift resistance from the underlying shallow bedrock.

Landslides and unstable soils continue to be potential impacts of the current project. The nature and scope of these impacts have been better defined with the current plan. It is the opinion of the City and its consultant, Alan Kropp & Associates, that the total collection of project documents and the analysis contained in this section provide an accurate and complete disclosure of potential geotechnical impacts expected from a three-lot subdivision at this stage of review. As noted in the FEIR, 2006 Update, and 2007 Supplemental Investigations, soil stability problems can be mitigated through conventional cut and fill (buttress) grading and appropriate foundation design. Once a tentative map is approved but prior to final map acceptance by the City, subdivision improvement plans will have to be reviewed and approved by the City Engineering Services Manager. The improvement plans will include site specific subsurface investigations, analyses and recommendations and sufficient details to confirm and substantiate the final design and the findings of this SEIR. In that regard, the City considers the additional details and geotechnical studies requested in the April 8, 2008 Seidelman Associates letter included in the Archer/Norris letter of May 8, 2008, to be part of the design-level studies and be included in the subdivision improvement plans.

Mitigation measures identified in the FEIR are still generally applicable to the current plan. However, in order to continue to reduce potential impacts to less than significant levels and have the previous EIR adequately apply to the current plan, the mitigation measures need to be updated to reflect the specific recommendations of the updated studies and to incorporate new technology and practices.

Mitigation Measure 5. The two ~~active~~ landslides on the site shall be repaired. These slides can be repaired by conventional removal and recompaction operations. ~~This would involve removing all landslide debris, excavating into the bedrock below the landslide, installing subsurface drainage, placing excavated materials back into the hillside as engineered fill, constructing surface drainage measures, and planting erosion control vegetation. The roadway~~

~~access to Parcel B in the large landslide area could be developed on the reconstructed landslide area. Similarly, the repair of the smaller landslide would involve removal and recompaction operations.~~ All landslide repairs and remedial grading shall implement the recommendations of the geotechnical engineer, Purcell, Rhoades & Associates, as contained in the Geotechnical Study Update, June 1, 2006 and Supplemental Investigation Report, July 26, 2007, or as amended by the City Engineering Services Manager.

At the discretion of the Engineering Services Manager and his consultant(s), additional field investigation and analysis may need to be conducted to determine the final depth of remedial earthwork. The additional field investigations may include large diameter, downhole logged borings. The scope of design-level plans and location of subsurface testing and related investigations shall be coordinated with the City Engineering Services Manager. Design-level plans may include cross-sections to coordinate drain bench and subdrain elevations and flow directions. The Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required. Where appropriate, as determined by the City Engineer, improvements and environmental mitigation measures required by the conditions of approval and all other applicable conditions of approval shall be incorporated into improvement plans.

Prior to submittal of grading and improvement plans to the City Engineering Services Manager for review and approval, the plans shall be reviewed by the project geotechnical engineer to ensure that the recommendations and specifications have been included. Plans shall include the re-establishment, as feasible, of topographic contours as they existed prior to remedial earthwork. ~~It is recommended that additional field and subsurface investigations be conducted to analyze alternative repair scenarios. A possible scenario is to focus on providing a fill buttress for the access road and leave the thick colluvial deposit at the eastern limits of the site (Boring B-2) in place. The City Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required.~~

During landslide and soil stabilization work, the project geotechnical engineer or engineering geologist, or their representative, must be present to observe the work performed and to perform whatever testing is necessary to properly evaluate the quality of the materials and their relative compaction and to ensure compliance with approved plans.

Mitigation Measure 6: Prior to submittal of design review and hillside development permit applications for the individual homesites, design-level subsurface testing and investigations shall be conducted to determine design parameters for house foundations and improvements. ~~Additional field investigation and analysis shall be conducted for the siting of the building site on Parcel C. These additional field investigations shall provide site specific recommendations for the buttress at Parcel C and will include a design level plan with cross-sections to coordinate drain bench and subdrain elevations and flow directions.~~ The scope and location of subsurface testing and related investigations shall be coordinated with the City Engineering Services Manager. Subsequent subsurface testing and related reports shall be subject to review and approval by the City Engineering Services Manager.

Mitigation Measure 7: Prior to final map approval by the City, the applicant shall submit detailed improvement and civil plans per the City Engineer's requirements. Said plan shall be

prepared by a registered civil engineer. All public improvements shall be designed to City of Lafayette standards and to accepted engineering design standards. The City Engineer has all such standards on file and the Engineer's decision shall be final regarding the specific standards that shall apply. Where appropriate, as determined by the City Engineer, improvements and environmental mitigation measures required by the conditions of approval and all other applicable conditions of approval shall be incorporated into improvement plans. ~~In conjunction with Mitigation Measure 6,~~ Design-level subsurface testing and investigations shall be conducted. The scope and location of subsurface testing and related investigations shall be coordinated with the City Engineer. Subsequent subsurface testing and related reports shall be subject to review and approval by the City Engineer. The City Engineer shall have final discretion in determining the scope and nature of any and all remedial work required.

~~Mitigation Measure: The proposed Parcel A homesite should be shifted to the southwestern corner of the parcel, and access to the parcel should be provided via the proposed roadway off Happy Valley Road, rather than via a driveway easement to Soares Lane.~~ *Note: The project has been redesigned to incorporate this mitigation measure and it is no longer necessary.*

Mitigation Measure 8: The project applicant shall conduct an investigation of the existing landslide underlying Happy Valley Road in the northeastern corner of the project site. The study should determine the extent to which the proposed project would affect landslide activity in this area, and identify any necessary repairs required by project impacts. The results of this study shall be reflected in the plans to be reviewed by the project geotechnical engineer, prior to review and approval by the City Engineering Services Manager. The Engineering Services Manager shall have final discretion in determining the scope and nature of any and all remedial work required. *Note: This mitigation measure has been revised to ensure that the project applicant is responsible for repairs of any project impacts.*

Mitigation Measure 9: The expansive soils in the area will have future shrink and swell characteristics. All house foundations and super-structures should be carefully designed by an experienced structural engineer. Particular care should be given to connections, hold-downs, and reinforcement aspects of the house design. All house foundations should consist of drilled piers which are extended well into the bedrock underlying the surficial soils. The piers should be interconnected, designed to resist lateral creep forces, and contain voids below the grade beams. Retaining walls should also be designed for relatively high creep forces. The roadway designs should also take into consideration the uplift forces from the expansive soils. It is likely that a thick layer of non-expansive imported materials would be needed to help provide stability to the roadway section. Imported material would also likely be needed under any slab-on-grade improvements, walkways, or patios in the building areas. Proper surface drainage measures around the proposed homes would also help to minimize danger from expansive soils. Such measures would include collection of gutter downspouts to discharge pipes, collection of water on paved surfaces, and collection of water on the uphill side of the homes. Prior to issuance of a building permit, the applicant shall submit plans to the City Engineering Services Manager for review and approval. The plans shall demonstrate that the foundation design for the proposed structures, access road, and retaining walls have included the recommendations contained in the Geotechnical Study Update, June 1, 2006 or as amended by the City Engineering Services Manager. Prior to submittal to the City Engineering Services Manager for review and approval,

a. A proposed schedule of grading activities, monitoring, and infrastructure milestones in chronological format;

c. Identification of critical areas of high erodibility potential and/or unstable slopes;

c. Contour and spot elevations indicating runoff patterns before and after grading;

d. Identification of erosion control measures on slopes, lots and streets. Measures shall be based on recommendations contained in the "Erosion and Sediment Control Field Manual" published by the San Francisco Regional Water Quality Control Board (RWQCB);

e. Utilization of soil stabilization techniques such as short-term biodegradable erosion control blankets and hydroseeding;

f. Retention of a landscape architect experienced in erosion control stabilization measures to work with the design civil engineer in establishing the proper erosion control measures in graded areas; and

g. Post-construction inspection of all drainage facilities for accumulated sediment, and the cleaning of these drainage structures of debris and sediment.

The ECP shall be described in the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project.

Mitigation Measure 11. To minimize impacts to neighboring properties and existing vegetation, the stockpile area shall be at least 25 feet from the nearest residence and be limited to the grassland area. Prior to final map approval or issuance of a grading permit, a plan showing a stockpile location meeting these criteria shall be submitted to the Planning Services Division for review and approval. No equipment, construction materials or dirt shall be placed within the dripline of any trees or within northern coastal scrub habitat. Prior to issuance of a grading or building permit, whichever occurs first, six-foot high fencing shall be installed to protect the northern coastal scrub habitat and adjacent trees. Placement of protective fencing shall be supervised in the field by the botanical consultant.

Level of Significance Following Mitigation

As explained above, the proposed project is consistent with the City's General Plan and zoning designations for the area. Supplemental investigations have better defined the nature and scope of potential impacts from landslides and unstable soils. Mitigation Measures 5, 7, 8, and 9 will ensure that landslides and unstable soils will be repaired and building foundations and infrastructure will be designed to properly withstand impacts from expansive soils. To further reduce the less than significant impacts from unstable soils, Mitigation Measure 6 requires additional studies and site specific recommendations for the individual homesites. Mitigation Measure 10 ensures that soil disturbance during construction and site development will not result in significant erosion or sedimentation by requiring an erosion control plan and compliance with the SWPPP prepared for the project. Finally, Mitigation Measure 11 will ensure that the stockpile area does not become a nuisance or contribute to erosion and sedimentation. Therefore, impacts from landslides, unstable soils, erosion, and sedimentation will be less than significant.

Although not specifically mentioned as a potential significant impact, the FEIR identified a mitigation measure to avoid the possibility of uncontrolled erosion during or following construction. In addition to the grading required for the interior access road, the current plan requires remedial earthwork. Temporary effects of these construction activities would result in soil disturbance and could lead to an increase in soil erosion and sedimentation and impact stormwater quality. Chapter 5-4, Storm Water Pollution Prevention Regulations, in the Lafayette Municipal Code, requires preparation of a Storm Water Pollution Prevention Plan ("SWPPP") prior to the issuance of any grading or building permits. The SWPPP must include measures to address erosion and sedimentation that could result from soil disturbance during construction. Implementation of such measures will ensure that construction impacts related to erosion are less than significant.

This earthwork will result in the grading of 79,500 cubic yards of dirt and a stockpile area capable of storing 24,000 cubic yards of dirt. If grading is not properly controlled, erosion and sedimentation of area drainages may occur if soil particles are spread by rainfall, flowing water, or wind. Sedimentation can lead to a reduction of water quality because sediment can carry nitrogen, phosphorus and trace metals. Sediment can also accumulate at the entrance of downstream storm drain system inlets and reduce capacity. Vegetative cover, which acts to stabilize the soil, would be removed from areas where earthwork and grading activities would occur.

Since the project would result in a disturbance of over one acre of land, the applicant must obtain coverage under the statewide General Construction Activities Storm Water Permit by filing a Notice of Intent (NOI) with the State Regional Water Quality Control Board Division of Water Quality. In addition to submitting the NOI, the applicant must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The filing would describe erosion control and storm water treatment measures to be implemented during construction and provide a schedule for monitoring performance. Best Management Practices (BMPs) to control erosion and sedimentation during grading and to stabilize the stockpile area could include use of soil binders, straw mulch, silt fences, fiber rolls, and gravel bag berms.

Impacts from erosion and sedimentation can continue to be mitigated to less than significant levels. Original mitigation measures will be updated to include current erosion control and stormwater pollution prevention practices.

With a reduction in the number of dwelling units and a reduced need for access roads and driveways, hydrologic impacts from the project are expected to be less than that identified in the FEIR. Provision of an on-site drainage system to ensure that stormwater flows from the site do not exceed pre-project levels will further reduce impacts identified in the FEIR and render some original mitigation measures unnecessary. The only addition or change necessary to make the previous EIR adequately apply to the current plan is to update the mitigation measures to reflect current stormwater pollution prevention practices and include specific performance standards.

Mitigation Measure 12: The City shall review and approve ~~both~~ the project drainage plan ~~and the areawide drainage system~~ to determine ~~their~~ its adequacy to accommodate the ~~100~~10-year

event. Where practical, the subdrain system shall discharge into the on-site drainage system. The stormwater control plan shall meet the requirements of the City's stormwater pollution prevention plan and the Contra Costa County Clean Water Program. Prior to approval of an improvement plan or issuance of a grading permit, whichever occurs first, the applicant shall submit to the City Engineering Services Manager a final hydrology and hydraulic analysis of the existing storm drain system to its discharge to Happy Valley Creek.~~junction with Upper Happy Valley Road to demonstrate the storm drain system's ability to accommodate the 100-year storm event. Any deficiencies shall be corrected as depicted in the final hydrology and hydraulic analysis to be approved by the City Engineering Services Manager.~~ The final hydrology and hydraulic analysis shall demonstrate to the satisfaction of the City Engineering Services Manager that the project meets following performance criteria including but not limited to:

a. Post-project peak run-off has been detained/retained onsite, and

b. That detention systems have been constructed to handle adequately the 10~~ and 100~~-year storm runoff from buildout of the site. If the systems are determined to be inadequately sized, the systems shall be expanded to provide for adequate detention and to maintain peak discharge at or below the discharge/runoff conditions documented in the FEIR.

Mitigation Measure 13: The drainage plan for Parcel C shall direct runoff to Happy Valley Creek and away from existing residences to the northeast.

~~Mitigation Measure: The maximum capacity of the 48-inch culvert should be maintained by careful and selective clearing of the creek immediately upstream and downstream of the culvert. Rock protection for the creek banks and Soares Lane are also recommended to minimize the potential for erosion during high flows, overtopping of the culvert, and damage to the roadway.~~ *Note: This mitigation measure cannot be legally imposed pursuant to section 15126.4(a)(5) of the CEQA Guidelines and should be eliminated. The culvert and creek are located on private property not under control of the applicants and this mitigation measure cannot be legally imposed. Regardless of whether or not this project is approved, it is the duty of the affected property owner to maintain the creek in a manner that does not create a public nuisance such as flooding from accumulation of debris or trash. On a case by case basis, the City can request that creeks and drainages to be cleared of accumulated debris and trash by declaring a public nuisance. Even if this mitigation measure could be legally imposed, it would not be necessary as the proposed on-site drainage system will achieve post-development peak flows to the downstream drainage systems that are equal to or less than the existing peak flows.*

~~Mitigation Measure: Repair or replacement of the culvert at the Upper Happy Valley Road should involve the applicant. Mitigation could include a payment of a fee proportional to the project's impacts.~~ *Note: This mitigation measure is no longer necessary since there will be no downstream impacts from the project. The current plan includes an on-site drainage system designed to achieve post-development peak flows to the downstream drainage systems that are equal to or less than the existing peak flows.*

Mitigation Measure 14: Maximum use of on-site stormwater detention should be incorporated into the project where possible through appropriate design of drainage facilities.

could indirectly affect on- and offsite populations. The Alameda striped racer is found in the Briones Hills, less than three miles from the project site. Optimal habitat includes a plentiful supply of prey (lizards), a nearby water source, sunny slopes (south, east and west-facing), and dense coastal scrub/riparian edges. The project site contains only a portion of the optimal requirements, primarily in the form of coastal scrub and riparian vegetation. However, this scrub is generally open and on north-facing slopes, reducing its value. The habitat on the site is thus marginal for the Alameda striped racer. It has the potential to be present, but this potential is judged to be low.

Current Plan

The current plan includes remedial earthwork involving 79,500 cubic yards of earth. The remedial earthwork will affect non-native grassland and about .4 acres of northern coastal scrub. The earthwork will not affect the population of Diablo rock rose located on the knoll in the scenic easement. Fifteen trees will be removed due to failing health and direct and indirect impacts of the remedial earthwork. The building site on Parcel C is in the same general location as the previous project but the long road proposed along the western boundary has been eliminated and will no longer have the potential to impact oak woodland or riparian vegetation. It should not be necessary to remove any trees to develop the individual homesites. The proposed on-site drainage plan includes an outfall to the creek on Parcel C.

Impacts related to cumulative development within the City have been analyzed in the City's General Plan EIR, which is incorporated by reference herein.

Impacts and Mitigation Measures

Significance Criteria

Consistent with the FEIR, the current plan would result in a significant impact if it would:

- Result in a significant change in the diversity or number of species; or
- Result in deterioration to existing fish or wildlife habitat.

Consistent with the 2008 Initial Study, the current plan will not have a significant impact on biotic resources.

Impacts and Mitigation Measures

The applicant submitted updated biological resource surveys for special status species including a Wildlife Survey prepared by Beeman & Associates (see Appendix E) and Rare Plant Surveys prepared by Dianne Lake Botanical Consulting (see Appendix F).

Surveys for special status wildlife species were conducted on November 8 and 28, 2005, and May 5, 2006. These site surveys were to judge the habitat suitability for the possible presence of all wildlife species listed as state and/or federally endangered, threatened, or species of special concern. The results of the Beeman Survey are summarized below.

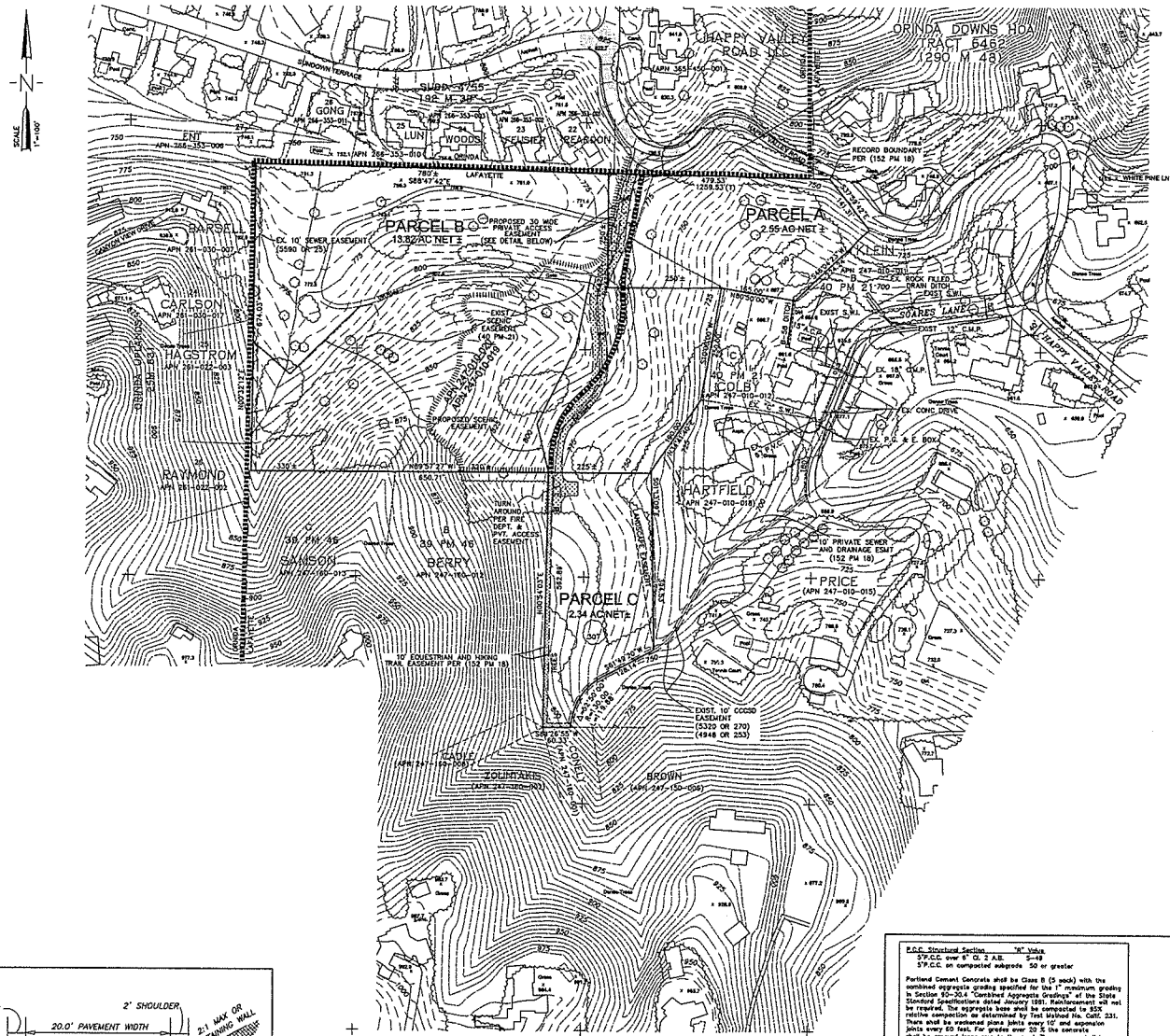
Insofar as fossil fuels currently are the principal source of energy, the proposed project would incrementally reduce existing supplies of fuel, such as fuel oil, natural gas, and gasoline. This represents a long-term commitment to consumption of essentially nonrenewable resources.

The current project and other projects in the City would require the commitment or destruction of other nonrenewable and slowly renewable resources. These resources include (but are not limited to) lumber and other forest products; sand and gravel; asphalt; petrochemical construction materials; steel, copper; lead, other metals; and water. A marginal increase in the commitment of social services and public maintenance services (e.g., waste disposal and treatment) would also be required.

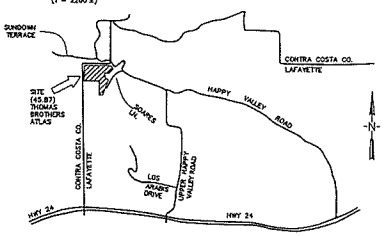
The environmental changes produced by the proposed project would occur mainly as a result of the alteration of the physical environment from conversion of approximately 12 acres of vacant land and open space to residential use; the remaining 6 acres of the project site would be maintained as open space. This change in land use would result in a long-term commitment to urbanization on the site, because reversion of the land back to a vacant land use or open space would be difficult and highly unlikely. The loss of approximately 12 acres of open space to residential use would constitute an irreversible environmental change. The long-term commitment to urbanization has largely already been made for this area of the City. The site is surrounded by residential neighborhoods and urban development.

Accidental spills of fuels, paints or other construction-related materials might occur on the project site during construction but are expected to be limited due to the size of the current plan. Such potential spills would not result in irreversible environmental changes.

No additions or changes other than those already identified in the SEIR are necessary to make the previous EIR adequately apply to the current plan.



VICINITY MAP
(1" = 2200'±)



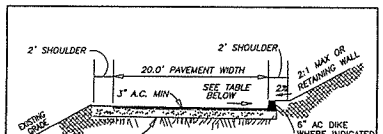
Lafayette, California

GENERAL NOTES

SITE:	ALL OF PARCEL 'D' AS SHOWN ON THE MAP OF SUBDIVISION MS 5-74, FILED SEPTEMBER 25, 1975 IN BOOK 40 OF PARCEL MAPS, AT PAGE 21, CONTRA COSTA COUNTY RECORDS. TOPOGRAPHY PER TENTATIVE MAP FOR SUBD. MS 504-87, DATED APRIL 1987
OWNER:	ROBIN LEAMY
ENGINEER:	SCHELL & MARTIN, INC. CIVIL ENGINEERING & LAND SURVEYING 3377 MT. DIABLO BLVD. LAFAYETTE, CALIFORNIA 94549 (925) 283-8111
ASSESSOR NO.:	A.P.N. 247-010-018, 020
EXISTING ZONING:	(R-40) SINGLE FAMILY RESIDENTIAL
PROPOSED USE:	(R-40) SINGLE FAMILY RESIDENTIAL
AREA:	19.23 ACRES ± TOTAL (RECORD)
UTILITIES:	WATER : E.B.M.U.D. SEWER : C.C.C.S.D POWER : P.G.& E. TELEPHONE: PACIFIC BELL
CONTOUR INTERVAL:	TEN (10) FEET
DATUM OF ELEVATION:	CONTRA COSTA COUNTY DATUM

LEGEND

	CITY/COUNTY BOUNDARY
	LOT BOUNDARY
500	EXISTING CONTOUR
	10' EQUESTRIAN AND HIKING TRAIL EASEMENT PER (152 PM 18)
	DENOTES 10' TRAIL EASEMENT PER (152 PM 18) TO BE ABANDONED.
P.U.E.	PUBLIC UTILITY EASEMENT
S.S.E.	SANITARY SEWER EASEMENT.
S.W.I.	STORM WATER INLET
	DENOTES PROPOSED 30' WIDE PRIVATE ACCESS EASEMENT
	DENOTES PROPOSED 10' WIDE TRAIL EASEMENT

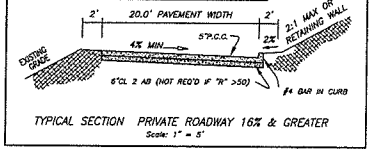


ROADWAY 16% AND GREATER USE CONCRETE PER NOTE
CROSS SLOPE FOR 2%-7% ROADWAY GRADE = 2%
CROSS SLOPE FOR 7%-12% ROADWAY GRADE = 3%
CROSS SLOPE FOR 12%-16% ROADWAY GRADE = 4%
CROSS SLOPE FOR 16%-25% ROADWAY GRADE = 5%

TYPICAL SECTION PRIVATE ROADWAY
Scale: 1" = 5'

P.C.C. Structural Section "R" Value
5"P.C.C. over 6" Cl. 2 A.B. 5-49
5"P.C.C. on compacted subgrade 50 or greater

Portland Cement Concrete shall be Class B (5 sack) with the combined aggregate grading specified for the 1" maximum grading in Section 90-3.04 "Combined Aggregate Gradings" of the State Standard Specifications dated January 1981. Reinforcement will not be required. The aggregate base shall be compacted to 95% relative compaction as determined by Test Method No. Calif. 231. There shall be weakened plane joints every 10' and expansion joints every 60 feet. For grades over 20 % the concrete shall be grooved transverse to the road. The grooves shall be a minimum 1/4" deep at 4" maximum intervals.



TYPICAL SECTION PRIVATE ROADWAY 16% & GREATER
Scale: 1" = 5'

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PLANNING DEPT

REGISTERED PROFESSIONAL ENGINEER — ROBERT D. MARTIN — No. 54337 — EXP. 12-31-09 — CIVIL — STATE OF CALIFORNIA

REV.:8-05-08
REV.: 4-25-08
REV.: 3-28-08

LICENSED LAND SURVEYOR — ROBERT D. MARTIN — EXP. 6-30-10 — No. 6690 — STATE OF CALIFORNIA

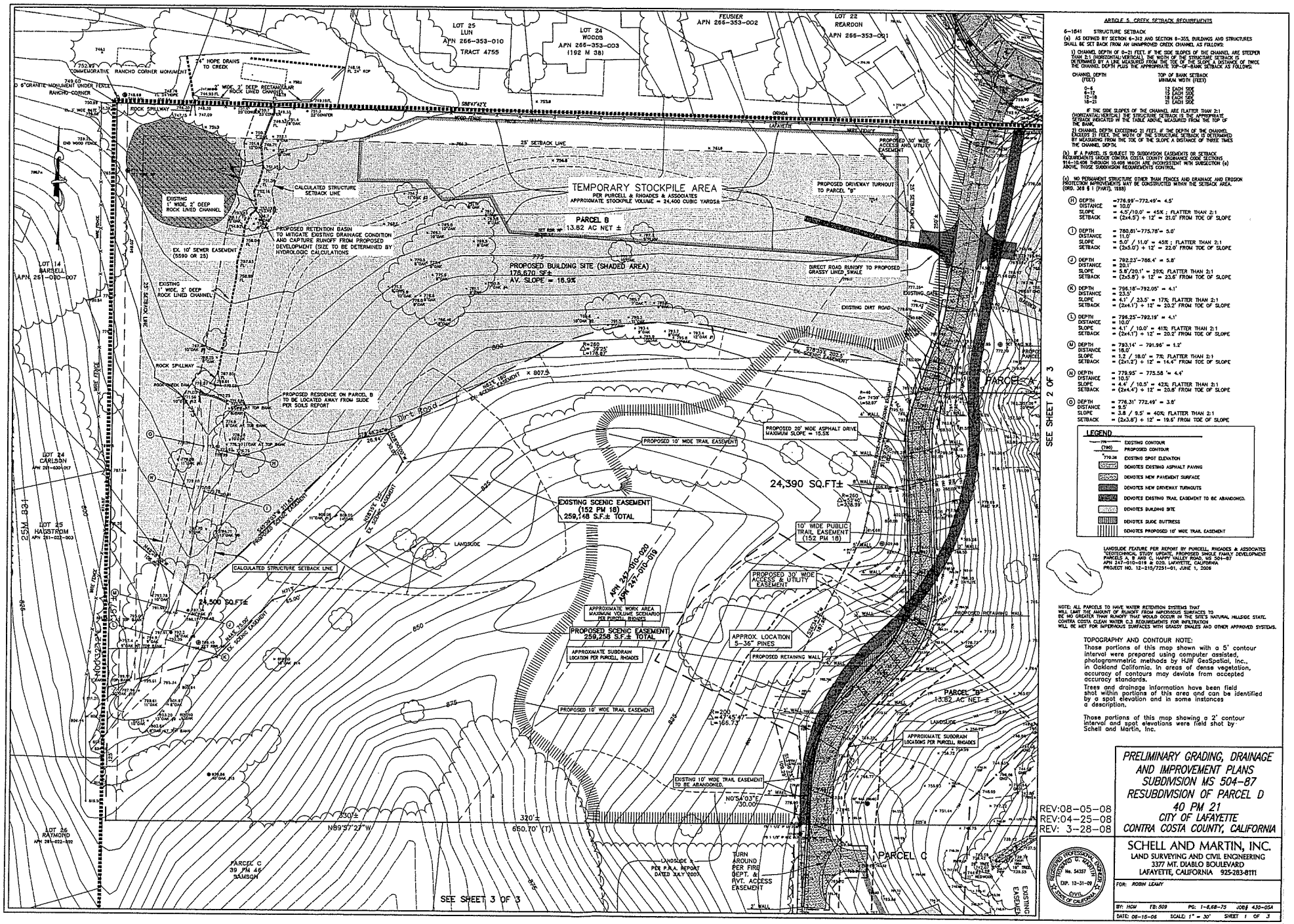
TENTATIVE MAP
SUBDIVISION MS 504-87
RESUBDIVISION OF PARCEL D
40 PM 21
CITY OF LAFAYETTE
CONTRA COSTA COUNTY, CALIFORNIA

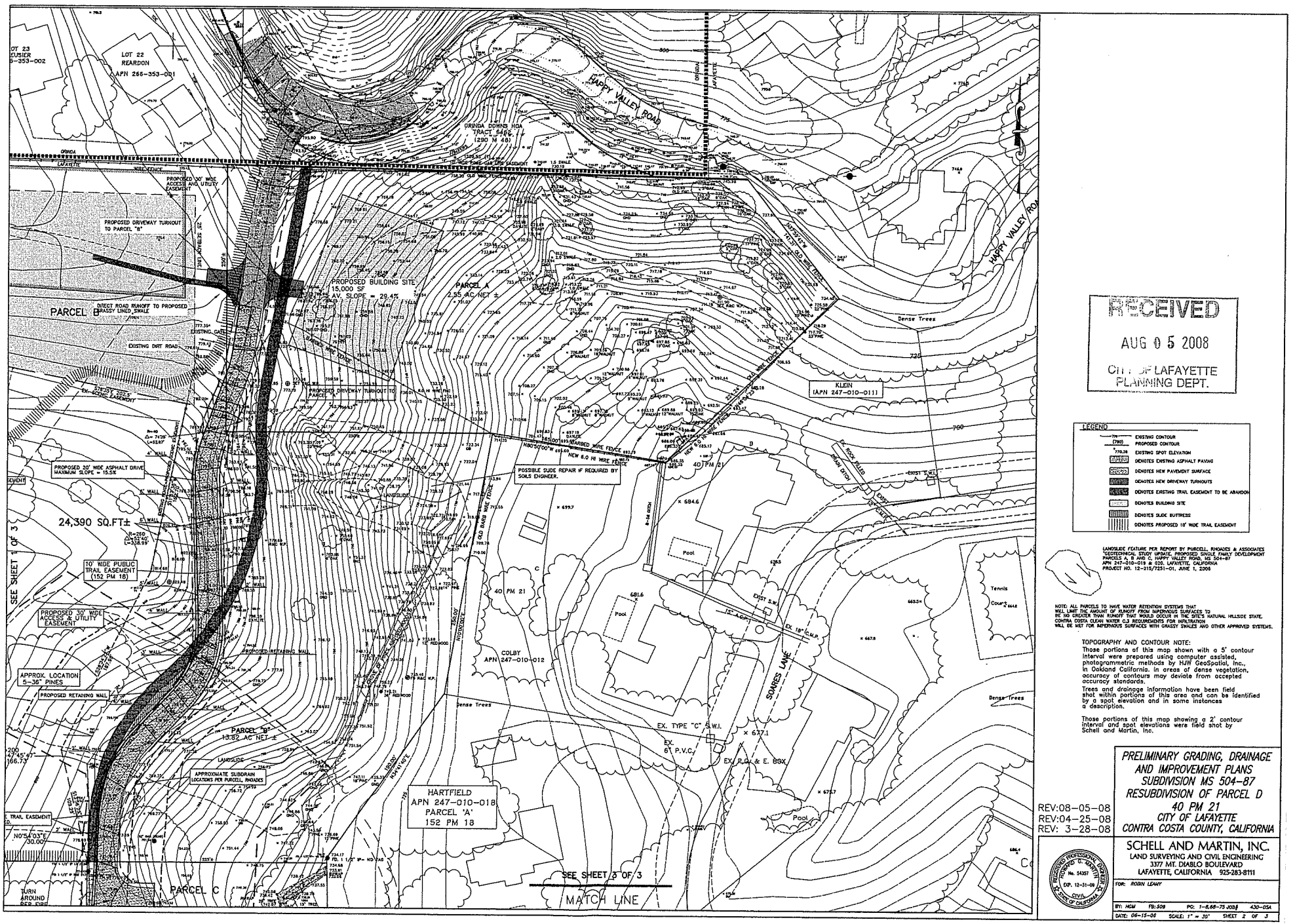
SCHELL AND MARTIN, INC.
LAND SURVEYING AND CIVIL ENGINEERING
3377 MT. DIABLO BOULEVARD
LAFAYETTE, CALIFORNIA 925-283-8111

FOR: ROBIN LEAMY

BY: HGM FB:509 PG: 1-8,58-75 JOB# 430-05A
DATE: 6-15-08 SCALE: 1" = 100' SHEET 1 OF 1

FIGURE 3


TEMPORARY STOCKPILE AREA
PER PURCELL & RHOADES & ASSOCIATES
APPROXIMATE STOCKPILE VOLUME = 24,400 CUBIC YARDS±
PARCEL B
13.82 AC NET ±
PROPOSED BUILDING SITE (SHADED AREA)
178,670 SF±
AV. SLOPE = 18.9%
PROPOSED RETENTION BASIN TO MITIGATE EXISTING DRAINAGE CONDITION AND CAPTURE RUNOFF FROM PROPOSED DEVELOPMENT (SIZE TO BE DETERMINED BY HYDROLOGIC CALCULATIONS
PROPOSED RESIDENCE ON PARCEL B TO BE LOCATED AWAY FROM SLIDE PER SOILS REPORT
PROPOSED DRIVEWAY TURNOUT TO PARCEL "B"
DIRECT ROAD RUNOFF TO PROPOSED GRASSY LINED SWALE
EXISTING DIRT ROAD
PROPOSED 20' WIDE ASPHALT DRIVE MAXIMUM SLOPE = 15.5%
PROPOSED 10' WIDE TRAIL EASEMENT
EXISTING SCENIC EASEMENT (152 PM 18) 259,148 S.F.± TOTAL
24,390 SQ.FT±
10' WIDE PUBLIC TRAIL EASEMENT (152 PM 18)
PROPOSED 30' WIDE ACCESS & UTILITY EASEMENT
PROPOSED SCENIC EASEMENT 259,258 S.F.± TOTAL
APPROXIMATE WORK AREA MAXIMUM VOLUME SCENARIO PER PURCELL RHOADES
APPROXIMATE SUBDRAIN LOCATION PER PURCELL RHOADES
APPROX. LOCATION 5-36" PINES
PROPOSED RETAINING WALL
PROPOSED 10' WIDE TRAIL EASEMENT
EXISTING 10' WIDE TRAIL EASEMENT TO BE ABANDONED.
APPROXIMATE SUBDRAIN LOCATIONS PER PURCELL RHOADES
LANDSLIDE PER P.M.A. REPORT DATED JULY 2007
TURN AROUND PER FIRE DEPT. AT PVT. ACCESS EASEMENT
CALCULATED STRUCTURE SETBACK LINE
EXISTING 1' WIDE, 2' DEEP ROCK LINED CHANNEL
EXISTING 2' WIDE, 2' DEEP ROCK LINED CHANNEL
EX. 10' SEWER EASEMENT (5590 OR 25)
24" HOPE DRAINS TO CREEK
6" GRANITE MONUMENT UNDER FENCE RANCHO CORNER
COMMEMORATIVE RANCHO CORNER MONUMENT
ROCK SPILLWAY
25' SETBACK LINE
30' SETBACK LINE
PROP. 25FT. WIDE ACCESS AND UTILITY EASEMENT
EXISTING GATE
EXISTING PARCEL
PARCEL A
PARCEL C
39 PM 46
DAMSON
LOT 14 BARSELL APN 251-080-007
LOT 24 CARLSON APN 251-030-017
LOT 45 HADSTROM APN 251-022-003
LOT 46 RAYMOND APN 251-022-002
LOT 25 LUN APN 266-353-010 TRACT 4755
LOT 24 WOODS APN 266-353-003 (192 M 38)
FEUSIER APN 266-353-002
LOT 22 REARDON APN 266-353-001
APN 247-010-009
APN 247-010-019
LANDSLIDE
SEE SHEET 3 OF 3
SEE SHEET 2 OF 3
N89°37'27"W 650.70' (T)
330±
320±
N00°54'03"E 30.00'
R=290 Δ=47°45'47" L=166.77
R=260 Δ=32°35' L=176.67
R=40 Δ=74°09' L=52.07
R=260 Δ=32°40' L=206.99
N00°32'32"E 715.5'
N89°45'24"W 26.94'
S00°32'32"W 715.5'
N11°E 5.00'
N11°E 23.00'
N11°E 30.00'
NORTH EX. SCENIC EASEMENT
EX. SCENIC EASEMENT
EXISTING SCENIC EASEMENT
PROPOSED SCENIC EASEMENT
EXISTING 30' WIDE ACCESS EASEMENT
EXISTING 25' WIDE SCENIC EASEMENT
EXISTING 10' WIDE SCENIC EASEMENT
EXISTING 10' WIDE SCENIC EASEMENT
EXISTING 10


PARCEL A
2.55 AC NET ±
PROPOSED BUILDING SITE
15,000 SF
AV. SLOPE = 29.4%
PARCEL B
13.82 AC NET ±
PARCEL C
24,390 SQ.FT±
PROPOSED DRIVEWAY TURNOUT TO PARCEL "B"
PROPOSED 30' WIDE ACCESS AND UTILITY EASEMENT
DIRECT ROAD RUNOFF TO PROPOSED GRASSY LINED SWALE
EXISTING DIRT ROAD
EXISTING GATE
PROPOSED DRIVEWAY TURNOUT TO PARCEL "A"
PROPOSED 20' WIDE ASPHALT DRIVE MAXIMUM SLOPE = 15.5%
10' WIDE PUBLIC TRAIL EASEMENT (152 PM 18)
PROPOSED 30' WIDE ACCESS & UTILITY EASEMENT
APPROX. LOCATION 5-36" PINES
PROPOSED RETAINING WALL
LANDSLIDE
APPROXIMATE SUBDRAIN LOCATIONS PER PURCELL, RHOADES
TRAIL EASEMENT
TURN AROUND PER CDF
SEE SHEET 1 OF 3
HAPPY VALLEY ROAD
ORINDA DOWNS HOA TRACT 6466 (290 M 46)
LOT 22 REARDON APN 266-353-021
LOT 23 CUSIER 5-353-002
KLEIN (APN 247-010-011)
COLBY APN 247-010-012
HARTFIELD APN 247-010-018 PARCEL 'A' 152 PM 18
POSSIBLE SLIDE REPAIR IF REQUIRED BY SOILS ENGINEER.
NEW 6.0 HI WIRE FENCE
OLD BARB WIRE FENCE
40 PM 21
SOARES LANE
EX. TYPE "C" S.W.I.
EX. 6" P.V.C.
EX. P.G. & E. BOX
EX. 18" C.M.P.
EX. 12" A.C.P.
Dense Trees
Pool
Tennis Court
SEE SHEET 3 OF 3
MATCH LINE

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LEGEND

- EXISTING CONTOUR
- (780) PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- DENOTES EXISTING ASPHALT PAVING
- DENOTES NEW PAVEMENT SURFACE
- DENOTES NEW DRIVEWAY TURNOUTS
- DENOTES EXISTING TRAIL EASEMENT TO BE ABANDON
- DENOTES BUILDING SITE
- DENOTES SLIDE BUTTRESS
- DENOTES PROPOSED 10' WIDE TRAIL EASEMENT

LANDSLIDE FEATURE PER REPORT BY PURCELL, RHOADES & ASSOCIATES "GEOTECHNICAL STUDY UPDATE, PROPOSED SINGLE FAMILY DEVELOPMENT PARCELS A, B AND C, HAPPY VALLEY ROAD, MS 504-87 APN 247-010-019 & 020, LAFAYETTE, CALIFORNIA PROJECT NO. 12-215/7251-01, JUNE 1, 2006

NOTE: ALL PARCELS TO HAVE WATER RETENTION SYSTEMS THAT WILL LIMIT THE AMOUNT OF RUNOFF FROM IMPERVIOUS SURFACES TO BE NO GREATER THAN RUNOFF THAT WOULD OCCUR IN THE SITE'S NATURAL HILLSIDE STATE. CONTRA COSTA CLEAN WATER C.3 REQUIREMENTS FOR INFILTRATION WILL BE MET FOR IMPERVIOUS SURFACES WITH GRASSY SWALES AND OTHER APPROVED SYSTEMS.

TOPOGRAPHY AND CONTOUR NOTE:
Those portions of this map shown with a 5' contour interval were prepared using computer assisted, photogrammetric methods by HJW GeoSpatial, Inc., in Oakland California. In areas of dense vegetation, accuracy of contours may deviate from accepted accuracy standards.

Trees and drainage information have been field shot within portions of this area and can be identified by a spot elevation and in some instances a description.

Those portions of this map showing a 2' contour interval and spot elevations were field shot by Schell and Martin, Inc.

REV:08-05-08
REV:04-25-08
REV: 3-28-08

PRELIMINARY GRADING, DRAINAGE AND IMPROVEMENT PLANS SUBDIVISION MS 504-87 RESUBDIVISION OF PARCEL D 40 PM 21 CITY OF LAFAYETTE CONTRA COSTA COUNTY, CALIFORNIA

SCHELL AND MARTIN, INC.
LAND SURVEYING AND CIVIL ENGINEERING
3377 MT. DIABLO BOULEVARD
LAFAYETTE, CALIFORNIA 925-283-8111

REGISTERED PROFESSIONAL ENGINEER RICHARD C. MARTIN No. 54357 EXP. 12-31-09 CIVIL STATE OF CALIFORNIA

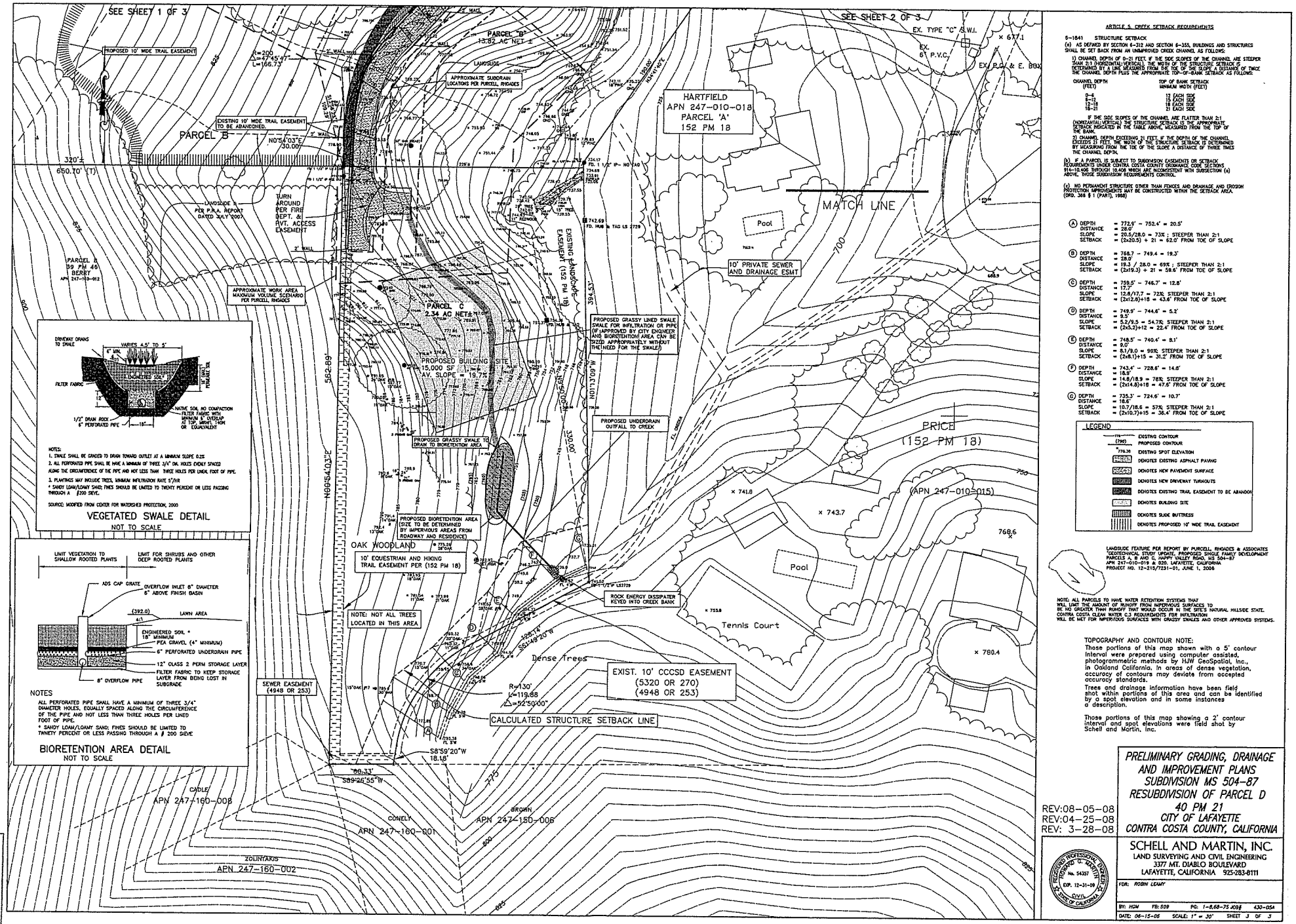
FOR: ROBIN LEAHY

BY: HCM FB: 509 PG: 1-6,68-75 JOB # 430-05A

DATE: 06-15-08 SCALE: 1" = 30' SHEET 2 OF 3

C:\SURVEY\PROJECTS\Jobs2005\430-05A\LEAHY TENTATIVE MAP MAY 2008.dwg Tue Aug 05 10:27:09 2008

FIGURE 4-B


SEE SHEET 1 OF 3
SEE SHEET 2 OF 3
PROPOSED 10' WIDE TRAIL EASEMENT
EXISTING 10' WIDE TRAIL EASEMENT TO BE ABANDONED.
PARCEL B
PARCEL B
13.82 AC NET ±
HARTFIELD
APN 247-010-018
PARCEL 'A'
152 PM 18
PARCEL C
2.34 AC NET±
PARCEL D
39 PM 46
BERRY
APN 247-113-012
LANDSLIDE ± PER P.R.A. REPORT DATED JULY 2007
TURN AROUND PER FIRE DEPT. & AVT. ACCESS EASEMENT
APPROXIMATE WORK AREA MAXIMUM VOLUME SCENARIO FOR PURCELL RHOADES
APPROXIMATE SUBDRAIN LOCATIONS PER PURCELL RHOADES
EXISTING LANDSLIDE
EXISTING EASEMENT (152 PM 18)
PROPOSED BUILDING SITE 15,000 SF AV. SLOPE = 19.7%
PROPOSED GRASSY LINED SWALE SWALE FOR INFILTRATION OR PIPE (IF APPROVED BY CITY ENGINEER AND BIORETENTION AREA CAN BE SIZED APPROPRIATELY WITHOUT THE NEED FOR THE SWALE)
10' PRIVATE SEWER AND DRAINAGE ESMT
PROPOSED UNDERDRAIN OUTFALL TO CREEK
PROPOSED GRASSY SWALE TO DRAIN TO BIORETENTION AREA
PROPOSED BIORETENTION AREA (SIZE TO BE DETERMINED BY IMPERVIOUS AREAS FROM ROADWAY AND RESIDENCE)
OAK WOODLAND
10' EQUESTRIAN AND HIKING TRAIL EASEMENT PER (152 PM 18)
NOTE: NOT ALL TREES LOCATED IN THIS AREA
ROCK ENERGY DISSIPATER KEYED INTO CREEK BANK
SEWER EASEMENT (4948 OR 253)
EXIST. 10' CCCSD EASEMENT (5320 OR 270) (4948 OR 253)
CALCULATED STRUCTURE SETBACK LINE
MATCH LINE
PRICE (152 PM 18)
(APN 247-010-015)
Pool
Tennis Court
Dense Trees
EX. TYPE "C" S.W.I.
EX. 6" P.V.C.
EX. P.G.& E. BOX
CADLE APN 247-160-008
CONELLY APN 247-160-001
BROWN APN 247-150-006
ZOLNYAKIS APN 247-160-002
N69°54'03"E 562.89'
N01°13'09"W 390.00'
S8°59'20"W 18.18'
S89°26'55"W 80.33'
S55°48'20"W 125.74'
R=130'
L=119.68
Δ=52°50'00"
320'± 650.70' (T)
N05°47'03"E 30.00'
R=200
Δ=47°45'47"
L=166.73
394.53'
DRIVEWAY DRAINS TO SWALE
VARIES 4.5' TO 5'
6" MIN.
LOOSENED SOIL
FILTER FABRIC
12"
NATIVE SOIL NO COMPACTION
FILTER FABRIC WITH MINIMUM 6" OVERLAP AT TOP, MINIMUM 150M OR EQUIVALENT
1/2" DRAIN ROCK
6" PERFORATED PIPE
18"
NOTES:
1. SWALE SHALL BE GRADED TO DRAIN TOWARD OUTLET AT A MINIMUM SLOPE 0.2%
2. ALL PERFORATED PIPE SHALL BE MADE A MINIMUM OF THREE 3/4" DIA. HOLES EVENLY SPACED ALONG THE CIRCUMFERENCE OF THE PIPE AND NOT LESS THAN THREE HOLES PER LINEAL FOOT OF PIPE.
3. PLANTINGS MAY INCLUDE TREES. MINIMUM INFILTRATION RATE 5"/HR
* SANDY LOAM/LOAMY SAND; FINES SHOULD BE LIMITED TO TWENTY PERCENT OR LESS PASSING THROUGH A #200 SIEVE.
SOURCE: MODIFIED FROM CENTER FOR WATERSHED PROTECTION, 2000
VEGETATED SWALE DETAIL
NOT TO SCALE
LIMIT VEGETATION TO SHALLOW ROOTED PLANTS
LIMIT FOR SHRUBS AND OTHER DEEP ROOTED PLANTS
ADS CAP GRATE
OVERFLOW INLET 6" DIAMETER 6" ABOVE FINISH BASIN
(392.0)
4:1
LAWN AREA
ENGINEERED SOIL * 18" MINIMUM
PEA GRAVEL (4" MINIMUM)
6" PERFORATED UNDERDRAIN PIPE
12" CLASS 2 PERM STORAGE LAYER
FILTER FABRIC TO KEEP STORAGE LAYER FROM BEING LOST IN SUBGRADE
8" OVERFLOW PIPE
NOTES
ALL PERFORATED PIPE SHALL HAVE A MINIMUM OF THREE 3/4" DIAMETER HOLES, EQUALLY SPACED ALONG THE CIRCUMFERENCE OF THE PIPE AND NOT LESS THAN THREE HOLES PER LINED FOOT OF PIPE.
* SANDY LOAM/LOAMY SAND; FINES SHOULD BE LIMITED TO TWNETY PERCENT OR LESS PASSING THROUGH A # 200 SIEVE
BIORETENTION AREA DETAIL
NOT TO SCALE

ARTICLE 5, CREEK SETBACK REQUIREMENTS

6-1641 STRUCTURE SETBACK

(a) AS DEFINED BY SECTION 6-312 AND SECTION 6-355, BUILDINGS AND STRUCTURES SHALL BE SET BACK FROM AN UNIMPROVED CREEK CHANNEL AS FOLLOWS:

1) CHANNEL DEPTH OF 0-21 FEET. IF THE SIDE SLOPES OF THE CHANNEL ARE STEEPER THAN 2:1 (HORIZONTAL-VERTICAL) THE WIDTH OF THE STRUCTURE SETBACK IS DETERMINED BY A LINE MEASURED FROM THE TOE OF THE SLOPE A DISTANCE OF TWICE THE CHANNEL DEPTH PLUS THE APPROPRIATE TOP-OF-BANK SETBACK AS FOLLOWS:

CHANNEL DEPTH (FEET)	TOP OF BANK SETBACK MINIMUM WIDTH (FEET)
0-6	15 EACH SIDE
7-17	20 EACH SIDE
18-21	25 EACH SIDE

IF THE SIDE SLOPES OF THE CHANNEL ARE FLATTER THAN 2:1 (HORIZONTAL-VERTICAL) THE STRUCTURE SETBACK IS THE APPROPRIATE SETBACK INDICATED IN THE TABLE ABOVE, MEASURED FROM THE TOP OF THE BANK.

2) CHANNEL DEPTH EXCEEDING 21 FEET. IF THE DEPTH OF THE CHANNEL EXCEEDS 21 FEET, THE WIDTH OF THE STRUCTURE SETBACK IS DETERMINED BY MEASURING FROM THE TOE OF THE SLOPE A DISTANCE OF THREE TIMES THE CHANNEL DEPTH.

(b) IF A PARCEL IS SUBJECT TO SUBDIVISION EASEMENTS OR SETBACK REQUIREMENTS UNDER CONTRA COSTA COUNTY ORDINANCE CODE SECTIONS 914-10.406 THROUGH 10.408, WHICH ARE INCONSISTENT WITH SUBSECTION (a) ABOVE, THOSE SUBDIVISION REQUIREMENTS CONTROL.

(c) NO PERMANENT STRUCTURE OTHER THAN FENCES AND DRAINAGE AND EROSION PROTECTION IMPROVEMENTS MAY BE CONSTRUCTED WITHIN THE SETBACK AREA. (ORD. 388 § 1 (PART), 1988)

(A) DEPTH = 772.9' - 752.4' = 20.5'
DISTANCE = 28.0'
SLOPE = 20.5/28.0 = 73% ; STEEPER THAN 2:1
SETBACK = (2x20.5) + 21 = 62.0' FROM TOE OF SLOPE

(B) DEPTH = 768.7 - 749.4 = 19.3'
DISTANCE = 28.0'
SLOPE = 19.3 / 28.0 = 69% ; STEEPER THAN 2:1
SETBACK = (2x19.3) + 21 = 59.6' FROM TOE OF SLOPE

(C) DEPTH = 759.5' - 746.7' = 12.8'
DISTANCE = 17.7'
SLOPE = 12.8/17.7 = 72% STEEPER THAN 2:1
SETBACK = (2x12.8)+18 = 43.6' FROM TOE OF SLOPE

(D) DEPTH = 749.9' - 744.6' = 5.2'
DISTANCE = 9.5'
SLOPE = 5.2/9.5 = 54.7% STEEPER THAN 2:1
SETBACK = (2x5.2)+12 = 22.4' FROM TOE OF SLOPE

(E) DEPTH = 748.5' - 740.4' = 8.1'
DISTANCE = 9.0'
SLOPE = 8.1/9.0 = 90% STEEPER THAN 2:1
SETBACK = (2x8.1)+15 = 31.2' FROM TOE OF SLOPE

(F) DEPTH = 743.4' - 728.8' = 14.6'
DISTANCE = 18.9'
SLOPE = 14.6/18.9 = 78% STEEPER THAN 2:1
SETBACK = (2x14.6)+18 = 47.6' FROM TOE OF SLOPE

(G) DEPTH = 735.3' - 724.6' = 10.7'
DISTANCE = 18.6'
SLOPE = 10.7/18.6 = 57% STEEPER THAN 2:1
SETBACK = (2x10.7)+15 = 36.4' FROM TOE OF SLOPE

LEGEND
- 779 EXISTING CONTOUR
- (790) PROPOSED CONTOUR
- ×776.36 EXISTING SPOT ELEVATION
- DENOTES EXISTING ASPHALT PAVING
- DENOTES NEW PAVEMENT SURFACE
- DENOTES NEW DRIVEWAY TURNOUTS
- DENOTES EXISTING TRAIL EASEMENT TO BE ABANDON
- DENOTES BUILDING SITE
- DENOTES SLIDE BUTTRESS
- DENOTES PROPOSED 10' WIDE TRAIL EASEMENT

LANDSLIDE FEATURE PER REPORT BY PURCELL, RHOADES & ASSOCIATES "GEOTECHNICAL STUDY UPDATE, PROPOSED SINGLE FAMILY DEVELOPMENT PARCELS A, B AND C, HAPPY VALLEY ROAD, MS 504-87 APN 247-010-018 & 020, LAFAYETTE, CALIFORNIA PROJECT NO. 12-215/7231-01, JUNE 1, 2006

NOTE: ALL PARCELS TO HAVE WATER RETENTION SYSTEMS THAT WILL LIMIT THE AMOUNT OF RUNOFF FROM IMPERVIOUS SURFACES TO BE NO GREATER THAN RUNOFF THAT WOULD OCCUR IN THE SITE'S NATURAL HILLSIDE STATE. CONTRA COSTA CLEAN WATER C.3 REQUIREMENTS FOR INFILTRATION WILL BE MET FOR IMPERVIOUS SURFACES WITH GRASSY SWALES AND OTHER APPROVED SYSTEMS.

TOPOGRAPHY AND CONTOUR NOTE:
Those portions of this map shown with a 5' contour interval were prepared using computer assisted, photogrammetric methods by HJW GeoSpatial, Inc., in Oakland California. In areas of dense vegetation, accuracy of contours may deviate from accepted accuracy standards.

Trees and drainage information have been field shot within portions of this area and can be identified by a spot elevation and in some instances a description.

Those portions of this map showing a 2' contour interval and spot elevations were field shot by Schell and Martin, Inc.

REV:08-05-08
REV:04-25-08
REV: 3-28-08

PRELIMINARY GRADING, DRAINAGE AND IMPROVEMENT PLANS
SUBDIVISION MS 504-87
RESUBDIVISION OF PARCEL D
40 PM 21
CITY OF LAFAYETTE
CONTRA COSTA COUNTY, CALIFORNIA

SCHELL AND MARTIN, INC.
LAND SURVEYING AND CIVIL ENGINEERING
3377 MT. DIABLO BOULEVARD
LAFAYETTE, CALIFORNIA 925-283-8111

REGISTERED PROFESSIONAL ENGINEER RICHARD C. MARTIN No. 54351 EXP. 12-31-09 CIVIL STATE OF CALIFORNIA

FOR: ROBIN LEAHY

BY: HJM FB: 509 PG: 1-8,68-75 JOB# 430-05A

DATE: 06-15-05 SCALE: 1" = 30' SHEET 3 OF 3

C:\D_DRIVE\PROJECTS\430\05\WORK-DEVELOPMENT TENTATIVE MAP MAY 2006.dwg Tue Aug 05 18:27:24 2008

FIGURE 4-C

Evaluation of Environmental Impacts Issues and Supporting Information Sources	Potentially Significant Impacts	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	The study also included a slope stability analysis for landslide repair. It was assumed that the entire work area was excavated and replaced with an earth buttress fill and could result in the excavation of 63,500 cubic yards of earth. The magnitude of this landslide and its repair were not considered during the earlier project and will have to be analyzed in a supplemental EIR. Supporting Source: 56, 57, 58.				
b)	Result in substantial soil erosion or the loss of topsoil?		X		
	Remedial earthwork for landslide repair could require the excavation of 79,500 cubic yards of soil resulting in the removal of topsoil. Substantial soil erosion could occur without adequate erosion control measures. Potential soil erosion impacts will be analyzed in a supplemental EIR; it is expected that potential impacts can be reduced to a less than significant level through the implementation of mitigation measures. Supporting Source: 37, 56.				
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
	See VIa, iv, above.				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
	On-site clay soils are moderate to high in expansion potential and may damage foundations, slabs and pavement. The significant effect of expansive soils can be mitigated by recognition of the condition and appropriate design. The 2006 geotechnical study states that in order to minimize the adverse effects of expansive soils, a pier and grade beam foundation system should be designed to resist uplift forces. Supporting Source: 56.				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?		~~X~~		X
	Not applicable. The Central Contra Costa County Sanitary District provides sewer and wastewater disposal service to the project area. Supporting Source: 10.				
VII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
	Supporting Source: 37.				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
	Supporting Source: 37.				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
	Supporting Source: 37.				

Dianne Lake, Botanical Consulting
1050 Bayview Farm Rd, #121, Pinole, CA 94564
510-741-8066 diannelake@yahoo.com

July 11, 2008

Robin Leamy, Managing Partner
Mohr Partners
1646 N. California Blvd., Ste. 510
Walnut Creek, CA 94596

Dear Robin,

Summary

Rare plant surveys were conducted at the 4123 Happy Valley Road site in Lafayette, California on April 11, May 12, and July 8, 2008 to cover the blooming periods of the rare plant species that could possibly occur on the site.

These surveys were an update of rare plant surveys that had previously been conducted in 2006, and originally in 1988.

No new rare plants were found during the current surveys.

Potential Special Status Plant Species

The rare plant species that were surveyd for are listed in the attached table "Potential Special Status Species For The Lafayette Area, Contra Costa County". This table was originally compiled for the 2006 surveys by consulting the California Department of Fish and Game's California Natural Diversity Database (CNDDB), the California Native Plant Society's *Inventory of Rare and Endangered Plants of California* (sixth edition, David Tibor, ed., California Native Plant Society (CNPS), Sacramento, California, August 2001), and the updated on-line seventh edition of that report.

The table that was compiled for the 2006 surveys was reviewed and compared to the updated 2008 version of the on-line seventh edition of the California Native Plant Society's *Inventory of Rare and Endangered Plants of California* to determine if any additional rare plant species needed to be surveyed for. Since field research and monitoring are always being done across the state of California, additional native plant species are constantly being found to have declined so radically that they must be added to the list of threatened and endangered species. Each year at least a few species are added. A review of the 2008 version of the CNPS Inventory revealed that three of these new species can occur in habitat found on the project site: Norris' beard moss (*Didymodon norrisii*), coast iris (*Iris longipetala*), and cotula navarretia (*Navarretia cotulifolia*). Thus, these three plants were added to the table of potential special status species compiled in 2006 and are included in the attached table.

In addition, a few plants have had name changes and the table was updated to include those changes. The three species that were affected are *California macrophylla* (formerly *Erodium macrophylum*), *Leptosiphon acicularis* (formerly *Linanthus acicularis*), and *Leptosiphon grandiflorus* (formerly *Linanthus grandiflorus*).

Methodology and Plant List

The site was walked during each of the three surveys conducted this year and a running plant list was kept. Only a few additional plants were seen that had not been on the list compiled during the 2006 surveys. The current list is attached.

Rare Plants

During the May 12 survey, a population of Diablo sunflower (*Helianthella castanea*) was monitored that had been observed and documented in both the 1988 and 2006 surveys. The population occurs on a knoll that will be set aside as a scenic easement. The knoll is situated well above the proposed building area and thus will not be impacted by construction or related activities. The population consists of 21 plants and has increased since the 2006 survey when there were only 16 plants. A rare plant form was completed and sent to the California Natural Diversity Database maintained by the California Department of Fish and Game.

A second population of Diablo sunflower had been found in the 1988 survey just beyond the site boundary but was not found in either the 2006 or current surveys. The area indicated in the 1988 report was searched carefully in both 2006 and 2008 but there was no sign of the plant and that population is now presumed extirpated.

The report *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties* by Dianne Lake (California Native Plant Society, East Bay Chapter, 7th edition, 2001) was consulted to determine if any locally rare plants (A-ranked by the East Bay Chapter of The California Native Plant Society) occurred on the project site. This report, updated periodically, lists and ranks native plant species that are rare in Alameda and Contra Costa counties but more common elsewhere in California.

None of the locally A-ranked species were found to occur on the site.

Conclusion

In conclusion, no rare or significant plants were observed on the site in any areas that would be affected by building or construction activities. The only rare plant occurring on the site, the Diablo sunflower, occurs on a knoll that has been designated for a scenic easement and is situated well above the areas of building and construction activities and will thus not be impacted by the project.

Sincerely,

Dianne Lake
Botanical Consultant

Plant Species Observed At 4123 Happy Valley Road. Lafayette, California
March 17, April 19, May 29 and July 12, 2006
and
April 11, May 12, and July 8, 2008
(Native plant species are in boldface)

Species	Common Name
Achillea millefolium*	**Yarrow**
Aesculus californica	**California buckeye**
Agoseris grandiflora	**Large-flowered agoseris**
Aira caryophyllea	Silver hairgrass
Anagallis arvensis	Scarlet pimpernel
Anthemis cotula	Mayweed
Aristolochia californica	**Dutchman's pipe**
Artemisia douglasiana*	**Mugwort**
Aster chilensis	California aster
Avena barbarta	Slender wild oats
Avena fatua	Wild oats
Baccharis douglasii	**Marsh baccharis**
Baccharis pilularis	**Coyote brush**
Bellardia trixago	Bellardia
Brassica nigra	Black mustard
Briza minor	Little rattlesnake grass
Bromus diandrus	Ripgut brome
Bromus hordeaceus	Soft chess
Bromus laevipes	**Woodland brome**
Bromus madritensis ssp. rubens	Red brome
Calystegia subacaulis	**Hill morning glory**
Capsella bursa-pastoris	Shepherd's purse
Cardamine oligosperma	Bittercress
Carduus pycnocephalus	Italian thistle
Cedrus sp. (planted)	Cedar (planted)
Cerastium glomeratum	Mouse-ear chickweed
Chenopodium album	Lamb's-quarters
Chlorogalum pomeridianum var. pomeridianum	**Soap plant**
Cirsium vulgare	Bull thistle
Claytonia perfoliata	**Miner's lettuce**
Conium maculatum	Poison hemlock
Convolvulus arvensis	Orchard bindweed
Coronopus didymus	Wart cress
(Cucurbitaceae) sp. (non-native)	Melon/Pumpkin/Squash
Cynara cardunculus	Artichoke thistle
Cynosurus echinatus	Dog-tail grass
Cyperus eragrostis	**Nut sedge**

Dactylis glomerata	Orchard grass
Deschampsia elongata	**Slender hairgrass**
Dichelostemma congesta	**Ookow**
Dodecatheon hendersonii	**Henderson's shooting star**
Dryopteris arguta	**Wood fern**
Echinochloa crus-galli	Barnyard grass
Elymus glaucus ssp. glaucus	**Blue wildrye**
Epilobium brachycarpum	Panicled willowherb
Epilobium canum ssp. canum*	**California fuschia**
Epilobium ciliatum ssp. ciliatum	**Willowherb**
Eriogonum nudum var. auriculatum*	**Coast buckwheat**
Erodium botrys	Long-beaked filaree/storksbill
Erodium cicutarium	Red-stemmed filaree/storksbill
Erodium moschatum	White-stem filaree/storksbill
Eschscholzia californica	**California poppy**
Euphorbia peplus	Petty spurge
Foeniculum vulgare	Fennel
Galium aparine	Bedstraw
Galium murale	Tiny bedstraw
Galium porrigens var. porrigens*	**Climbing bedstraw**
Geranium dissectum	Cut-leaf geranium
Geranium molle*	Dove-footed geranium
Gnaphalium luteo-album	Cudweed
Gnaphalium sp.	Cudweed
Grevillea robusta (planted)	Silk-oak (planted)
Helenium puberulum	**Sneezeweed**
Helianthella castanea*	**Mt. Diablo sunflower**
Heracleum lanatum	**Cow parsnip**
Heteromeles arbutifolia	**Toyon**
Holodiscus discolor	**Creambush**
Hordeum marinum ssp. gussonianum	Mediterranean barley
Hordeum murinum ssp. leporinum	Hare barley
Hypochaeris glabra	Smooth cat's ear/false dandelion
Hypochaeris radicata	Hairy cat's ear/false dandelion
Iris sp. (non-native)	Iris (non-native)
Juglans californica var. hindsii (planted)	**N Calif black walnut (planted)**
Juncus bufonius var. bufonius	**Toad rush**
Juncus patens	**Common rush**
Juncus xiphioides	**Iris-leaved rush**
Lactuca serriola	Prickly lettuce
Lactuca virosa	Wild lettuce
Lepidium nitidum var. nitidum	**Shining peppergrass**
Leymus triticoides	**Creeping ryegrass**
Lolium multiflorum	Italian ryegrass
Lupinus bicolor	**Dove lupine; dwarf lupine**
Lupinus formosus var formosus	**Summer lupine**
Lythrum hyssopifolium	Hyssop loosestrife

Madia gracilis	**Slender tarweed**
Madia sativa	**Coast tarweed**
Malva sp.	Mallow
Marah fabaceus	**Wild cucumber**
Medicago polymorpha	Burr clover
Mimulus guttatus	**Common large monkeyflower**
Monardella villosa ssp. villosa*	**Coyote mint**
Navarretia squarrosa	**Skunkweed**
Nemophila heterophylla*	**Variable-leaved nemophila**
Osmorhiza chilensis	**Sweet cicely**
Oxalis pes-caprae	Bermuda buttercups
Papyrus sp. (planted)	Papyrus (planted)
Pentagramma triangularis ssp. triangularis	**Goldback fern**
Perideridia kelloggii*	**Yampah**
Phalaris aquatica	Harding grass
Phalaris paradoxa	Paradox canary grass
Picaea sp. (planted)	Spruce (planted)
Picris echioides	Bristly ox-tongue
Pinus radiata (planted)	Monterey pine (planted)
Plantago major	Common plantain
Poa annua	Annual bluegrass
Poa pratensis	Kentucky bluegrass
Polygonum arenastrum	Yard knotweed
Polypogon monspeliensis	Rabbitsfoot grass
Prunus spp. (planted)	Plum/cherry (planted)
Pyracantha sp.	Firethorn
Pyrus sp. (planted)	Pear
Quercus agrifolia	**Coast live oak**
Quercus lobata	**Valley oak**
Ranunculus californicus*	**California buttercup**
Rhamnus californica	**Coffeeberry**
Rorippa nasturtium-aquaticum	Watercress
Rosa gymnocarpa*	**Wood rose**
Rubus discolor	Himalaya blackberry
Rubus ursinus	**California blackberry**
Rumex acetosella	Sheep sorrel
Rumex conglomeratus	Green dock
Rumex crispus	Curly dock
Rumex obtusifolius	Bitter dock
Rumex pulcher	Fiddle dock
Salix babylonica (planted)	Weeping willow (planted)
Salix laevigata	**Red willow**
Salix lasiolepis	**Arroyo willow**
Sambucus mexicana	**Blue elderberry**
Sanicula bipinnatifida*	**Purple sanicle**
Sanicula crassicaulis	**Pacific sanicle**
Scandix pecten-veneris	Shepherd's needles

Scrophularia californica ssp. californica	**California bee plant**
Senecio vulgaris	Groundsel
Sequoia sempervirens (planted)	**Coast redwood (planted)**
Silybum marianum	Milk thistle
Sisymbrium officinale	Hedge mustard
Sisyrinchium bellum	**Blue-eyed-grass**
Sonchus asper	Prickly sow-thistle
Sonchus oleraceus	Sow-thistle
Stachys ajugoides var. rigida	**Woodmint/hedge-nettle**
Symphoricarpos albus ssp. laevigatus*	**Snowberry**
Taxus sp. (planted)	Yew (planted)
Torilis arvensis	Hedge parsley
Toxicodendron diversilobum	**Poison oak**
Tragopogon porrifolius	Purple salsify
Trifolium dubium	Shamrock
Trifolium gracilentum var. gracilentum	**Pin-point clover**
Trifolium hirtum	Rose clover
Trifolium sp.	Clover
Trifolium subterraneum	Subterranean clover
Trillium chloropetalum	**Giant trillium**
Triteleia laxa	**Ithuriel's spear**
Umbellularia californica	**California bay tree**
Urtica dioica ssp. holosericea	**Stinging nettle**
Verbena lasiostachys var. lasiostachys	**California vervain**
Vicia sativa ssp. nigra	Common vetch
Vicia sativa ssp. sativa	Spring vetch
Vicia villosa ssp. varia	Winter vetch
Vinca major	Periwinkle
Vitis californica	California grape
Vulpia bromoides	Six-weeks fescue
Vulpia myuros var. myuros	Zorro grass
Wyethia helenioides*	**Woolly mule-ears**

***Plants occurring only on protected knoll, outside of and uphill from building areas**

POTENTIAL SPECIAL STATUS SPECIES FOR THE LAFAYETTE AREA, CONTRA COSTA COUNTY 2008

Scientific Name/ Common Name	Status	Habitat	Blooming Period
Amsinckia grandiflora large-flowered fiddleneck	Fed: Endangered State: Endangered CNPS: List 1B.1	Cismontane woodland, valley and foothill grassland	April-May
Amsinckia lunaris bent-flowered fiddleneck	Fed: None State: CEQA CNPS: List 1B.2	Cismontane woodland; valley and foothill grassland	March-June
Androsace elongata ssp. *acuta* California androsace	Fed: None State: CEQA CNPS: List 4.2	Chaparral, cismontane woodland, coastal scrub	March-June
Arctostaphylos pallida pallid manzanita	Fed: Threatened State: Endangered CNPS: List 1B.1	Broadleaved upland forest, chaparral, cismontane woodland (siliceous shale)	Dec.-March
Balsamorhiza macrolepis var. *macrolepis* big-scale balsamroot	Fed: None State: CEQA CNPS: List 1B.2	Cismontane woodland, valley and foothill grassland (sometimes serpentinite)	March-June
Blepharizonia plumosa big tarplant	Fed: None State: CEQA CNPS: List 1B.1	Valley and foothill grassland	July-Oct.
Calandrinia breweri Brewer's calandrinia	Fed: None State: CEQA CNPS: List 4.2	Chaparral, coastal scrub	March-June
California macrophylla round-leaved filaree	Fed: None State: CEQA CNPS: List 2.1	Coastal scrub, valley and foothill grassland	March-May
Calochortus pulchellus Mt. Diablo fairy-lantern	Fed: None State: CEQA CNPS: List 1B.2	Chaparral, cismontane woodland, valley and foothill grassland	April-June
Calochortus umbellatus Oakland star-tulip	Fed: None State: CEQA CNPS: List 4.2	Broadleaved upland forest, chaparral, conifer forest, valley and foothill grassland	March-May
Carex comosa bristly sedge	Fed: None State: CEQA CNPS: List 2.1	Coastal prairie, marshes and swamps, valley and foothill grassland	May-Sept.

POTENTIAL SPECIAL STATUS SPECIES FOR THE LAFAYETTE AREA, CONTRA COSTA COUNTY 2008

Scientific Name/ Common Name	Status	Habitat	Blooming Period
Cirsium andrewsii Franciscan thistle	Fed: None State: CEQA CNPS: List 1B.2	Broadleaved upland forest, coastal bluff scrub	June-July
Cryptantha hooveri Hoover's cryptantha	Fed: None State: CEQA CNPS: List 1A	Valley and foothill grassland (sandy)	April-May
Delphinium californicum ssp. *interius* hospital canyon larkspur	Fed: None State: CEQA CNPS: List 1B.2	Cismontane woodland (mesic)	April-June
Didymodon norrisii Norris' beard moss	Fed: None State: CEQA CNPS: List 2.2	Cismontane woodland, lower montane coniferous forest	Unknown
Dirca occidentalis western leatherwood	Fed: None State: CEQA CNPS: List 1B.2	Broadleaved upland forest, conifer forest, chaparral, riparian forest, cismontane woodland	January-April
Eschscholzia rhombipetala diamond-petaled California poppy	Fed: None State: CEQA CNPS: List 1B.1	Valley and foothill grassland (clay)	March-April
Fritillaria agrestis stinkbells	Fed: None State: CEQA CNPS: List 4.2	Chaparral, cismontane woodland, valley and foothill grassland (clay, sometimes serpentinite)	March-April
Fritillaria liliacea fragrant fritillary	Fed: None State: CEQA CNPS: List 1B.2	Coastal prairie, coastal scrub, valley and foothill grassland (often serpentinite)	Feb.-April
Helianthella castanea Diablo helianthella	Fed: None State: CEQA CNPS: List 1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland	April-June
Hesperevax caulescens hogwallow starfish	Fed: None State: CEQA CNPS: List 4.2	Vernal Pools	April-June
Hoita strobilina Loma Prieta hoita	Fed: None State: CEQA CNPS: List 1B.1	Chaparral, cismontane woodland	May-June

POTENTIAL SPECIAL STATUS SPECIES FOR THE LAFAYETTE AREA, CONTRA COSTA COUNTY 2008

Scientific Name/ Common Name	Status	Habitat	Blooming Period
Holocarpha macradenia Santa Cruz tarplant	Fed: Threatened State: Endngered CNPS: List 1B.1	Coastal prairie, valley and foothill grassland	June-October
Irsi longipetala coast iris	Fed: None State: CEQA CNPS: List 4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps	March-May
Juglans californica var. *hindsii* Northern California black walnut	Fed: None State: CEQA CNPS: List 1B.1	Cismontane woodland, riparian forest	April-May
Leptosiphon acicularis bristly linanthus	Fed: None State: CEQA CNPS: List 4.2	Chaparral, cismontane woodland, coastal prairie	April-July
Leptosiphon grandiflorus large-flowered linanthus	Fed: None State: CEQA CNPS: List 4.2	Coastal bluff scrub, closed-cone conifer forest, cismontane woodland, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland	April-July
Madia radiata showy madia	Fed: None State: CEQA CNPS: List 1B.1	Cismontane woodland, valley and foothill grassland	March-May
Meconella oregona Oregon meconella	Fed: None State: CEQA CNPS: List 1B.1	Cismontane woodland, valley and foothill grassland, miscellaneous habitats	March-April
Micropus amphibolus Mt. Diablo cottonweed	Fed: None State: CEQA CNPS: List 3.2	Broadleaved upland forest, cismontane woodland, valley and foothill grassland	April-May
Microseris sylvatica sylvan microseris	Fed: None State: CEQA CNPS: List 4.2	Cismontane woodland, valley and foothill grassland	March-May
Monardella antonina ssp. *antonina* San Antonio hills monardella	Fed: None State: CEQA CNPS: List 3	Chaparral, cismontane woodland	June-August
Monardella villosa ssp. *globosa* robust monardella	Fed: None State: CEQA CNPS: List 1B.2	Chaparral, Woodland	June-July

POTENTIAL SPECIAL STATUS SPECIES FOR THE LAFAYETTE AREA, CONTRA COSTA COUNTY 2008

Scientific Name/ Common Name	Status	Habitat	Blooming Period
Navarretia cotulifolia cotula navarretia	Fed: None State: CEQA CNPS: List 4.2	Chaparral, cismontane woodland, valley and foothill grassland	May-June
Perideridia gairdneri ssp. gairdneri Gairdner's yampah	Fed: None State: CEQA CNPS: List 4.2	Broadleaved upland forest, chaparral, valley and foothill grassland, vernal pools (mesic)	June-Oct.
Piperia michaelii Michael's rein orchid	Fed: None State: CEQA CNPS: List 4.2	Coastal Bluff Scrub, Conifer Forest, Woodland	May-August
Plagiobothrys chorisianus var. *chorisianus* Choris's popcorn-flower	Fed: None State: Endangered CNPS: List 1B.1	Chaparral, coastal prairie, coastal scrub (mesic)	April-June
Plagiobothrys diffusus San Francisco popcorn-flower	Fed: None State: CEQA CNPS: List 4.2	Coastal prairie, valley and foothill grassland	April-June
Ranunculus lobbii Lobb's aquatic buttercup	Fed: None State: CEQA CNPS: List 4.2	Cismontane woodland, north coast conifer forest, valley and foothill grassland, vernal pools (mesic)	March-May
Viburnum ellipticum oval-leaved viburnum	Fed: None State: CEQA CNPS: List 2.3	Chaparral	May-June

Explanation of Status Terms

Federal

Endangered: Required for consideration
Threatened: Required for consideration

State

Endangered: Required for consideration
Rare: Required for consideration
CEQA: Recommended for consideration under California Environmental Quality Act

CNPS (California Native Plant Society

1A: Plants presumed extinct in California. Required for consideration
1B: Rare, threatened or endangered in California and elsewhere. Required for consideration

List 2: Plants rare, threatened or endangered in California, but more common elsewhere. Required for consideration
List 3: Plants needing more information – a review list. Recommended for consideration
List 4: Plants of limited distribution – a watch list. Recommended for consideration

CNPS Threat Code Extensions: .1 Seriously endangered in California
.2 Fairly endangered in California
.3 Not very endangered in California

APPENDIX H

BEEMAN & ASSOCIATES - JULY 23, 2008

BEEMAN & ASSOCIATES
Biological Consultants
Gary A. Beeman
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Specializing in Wildlife Habitat Assessments & Wildlife Field Surveys

July 23, 2008

Robin Leamy
1170 Upper Happy Valley Road
Lafayette, CA. 94549

RE: CLARIFICATION OF MY STATEMENT OF "NO SUITABLE HABITAT" FOR THE CA. RED-LEGGED FROG IN MY LETTER REPORT DATED JUNE 3, 2006 ON THE PROPOSED PROJECT SITE AT 4123 HAPPY VALLEY ROAD, LAFAYETTE.

SITE SUITABILITY FOR RED-LEGGED FROG

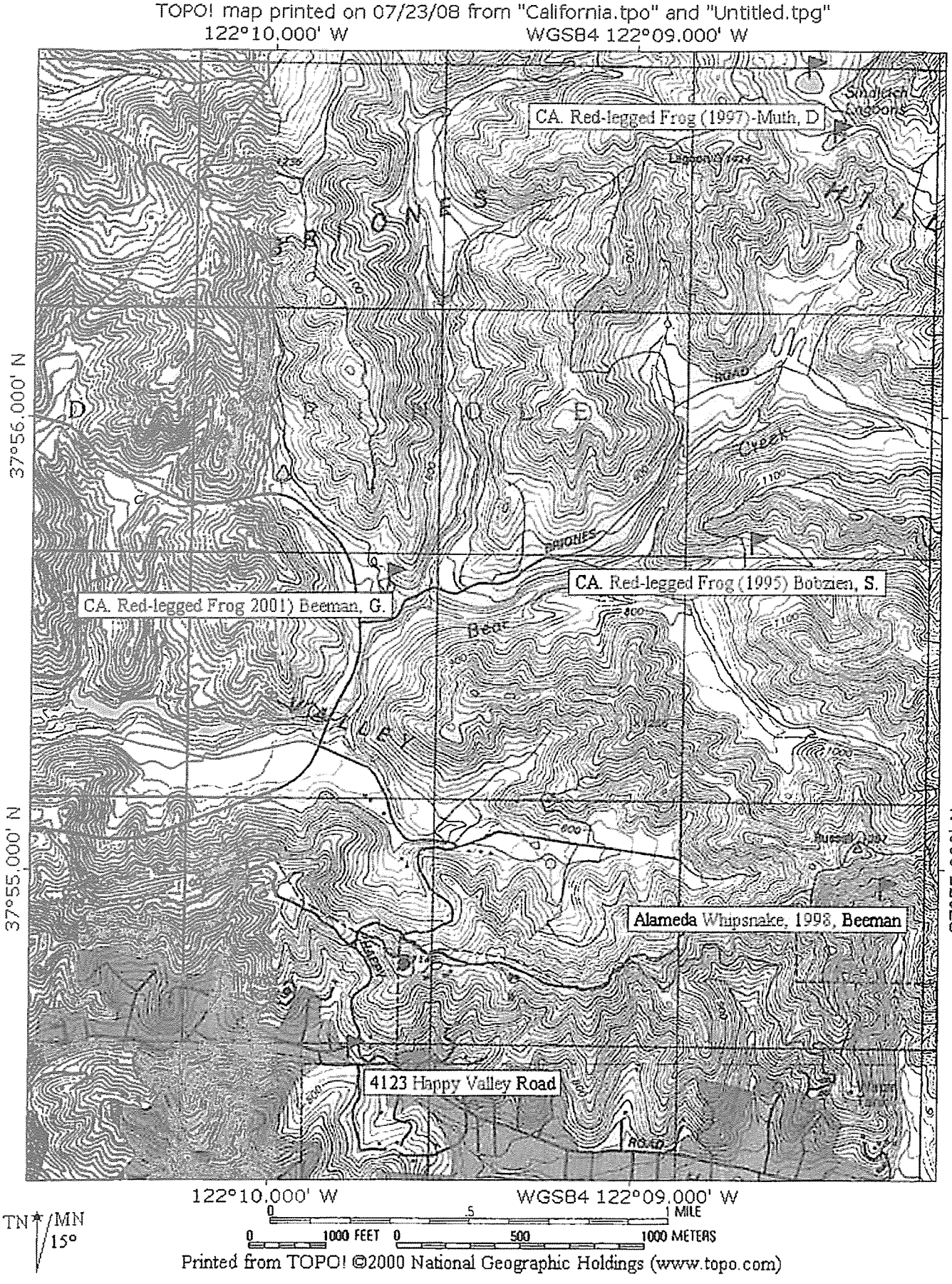
This site has only two water drainages. The first one is located on the northern central part of the site and is not a creek but only a intermittent drainage. The other is located at the extreme southern end of the site and is only an intermittent creek, not holding enough water long enough to provide habitat for this frog. Even when this creek is running it is not deep enough (24") and/or have the physical components to provide suitable refuge to protect frogs from predators. The farthest normal seasonal movement between breeding and wintering habitat is 1 mile or less.

The nearest breeding habitat was found by myself approx. 1.5 miles to the north and over a large ridge. This site has been absence of frogs since 2004. The next closest site, found by Bobzien, S. in 1995 is still active.

The aforementioned reasons suggest that this site has very little or no possibility of having CA. Red-legged frogs existing on or near this site.

Sincerely,

Gary A. Beeman



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APPENDIX I

SCHELL & MARTIN - JUNE 19, 2008

SCHELL & MARTIN, INC.
CIVIL ENGINEERING & LAND SURVEYING
3377 MT. DIABLO BLVD., LAFAYETTE, CA 94549-4085 PHONE 925-283-8111 FAX 925-283-2866

June 19, 2008

City of Lafayette
3675 Mt. Diablo Blvd., Suite 210
Lafayette, CA 94549

Attention: Christine Sinnette, Planning Department

Subject: Leamy Tentative Map MS 504-87
4123 Happy Valley Road, Lafayette

Dear Planning Commission:

This letter is being written as a response to an email received this morning of a letter from Walt Price to the Planning Commission dated June 17, 2008. In his letter he states that "there seems to be a large drainage canal that will route much of the water from the site into the creek at the border of my property." As the commission is aware this project must comply with Contra Costa County C.3 Clean Water regulations for infiltration of impervious surfaces. The "large drainage canal" that Mr. Price is referring to is a grassy lined swale that will provide infiltration that drains to a bioretention area that will provide the necessary infiltration for the impervious developed area. A prior proposal showed runoff from impervious surfaces being tight-lined to a bioretention area. We note on our plan that if the city engineer does not want to see a swale, the bioretention area can be sized accordingly to provide necessary infiltration. The proposed grassy lined swale has an underdrain that captures flow after it has filtered through an engineered soil. We have been working with Tony Coe create the acceptable solution for providing infiltration for the site. The C.3 guidebook allows for a maximum 6% slope and the slope can be achieved in this area. The grassy lined swale if utilized will be placed in a developed area only. Hillside areas above the swale will be captured and redirected to an acceptable discharge point as well.

In order to provide infiltration, the swale (Mr. Price's "canal") has to be wide enough to spread the flow uniformly. This causes deceleration and allows the water to move down into the filtering material. Check dams can be installed if necessary that further slow down the runoff. An underdrain picks up this filtered water and takes it to a discharge point. Similarly the bioretention area shown on the plan treats the runoff that is picked up by underdrains and discharged. A pond liner can be installed at the bottom of the bioretention area if the soils engineer feels it is necessary. Runoff passing through such a system will be released at a more gradual rate and substantially later than the peak flow from any storm event. Our plans clearly identify the slide that Mr. Price refers to. It is our intent to take this dissipated flow and direct it to an outfall with a dissipater in the creek. The slide area adjacent to the creek will have to be stabilized.

Perhaps Mr. Price is thinking that all of the hillside flow will be captured and directed to the south in an earthen swale. This is not the intent. **It is important to point out that overland flow, flow from pervious surfaces, will not be carried in this swale.** Impervious flow and pervious flow cannot commingle. Overland flow from the area above the road will be captured and allowed to discharge below the roadway in a dispersion system that will be approved by Tony Coe, and will bring the

drainage pattern back into what it was prior to the alleged grading of the site by John Barsell in the 1980's.

There is approximately 9,900 SF of driveway and turnaround and without knowing what is planned for the homesite for the Leamys, perhaps 7,500 SF of impervious surface. A preliminary hydrology was prepared for this project using the rational method for the 10 and 100 year storm events. For a 10 minute time of concentration the flow rate is 1.10 CFS for the 10 year and 1.29 CFS for the 100 year. Actual flow rate will decrease dramatically when the runoff enters the swale or bioretention area and begins the infiltration process. The flow rate mentioned above before it reaches the swale or basin can be accommodated by a pipe sized between 6" and 8". The basin can be sized to retain and slowly release water to the creek as required.

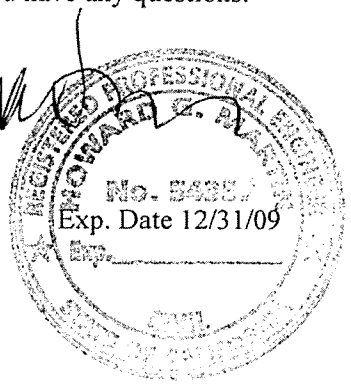
Mr. Price's concerns have been addressed in the extensive planning to date, and the end result will be improved drainage systems for the neighbors adjacent and downhill from the Leamy's property.

Please call me if you have any questions.

Submitted by:

Howard G. Martin

RCE 54357



APPENDIX J

CHRIS KUKULA – JUNE 19, 2008

Chris Kukula, Landscape Architect, 4090, Certified Arborist, WE-2238
BARRY • KUKULA • ASSOCIATES
Architecture. General Contracting. Landscape Architecture. Certified Arborist. Landscape Illustration.
1136 Winsor Avenue, Piedmont, Ca 94610 T. 510.595.5370 F. 510.595.5377 barrykukula@earthlink.net

June 19, 2008

Robin Leamy
1170 Upper Happy Valley Road
Lafayette, CA 94549

Dear Mr. Leamy,

I have reviewed the report I submitted to you in November 2005 regarding the 48" Valley Oak (*Quercus lobata*). The following is an excerpt from that report:

> *The mature Q. lobata appears to have had a significant co-dominant trunk. One trunk failed likely due to the included bark and weight of the canopy. The wound injured a very large portion of the trunk (see photo). It is apparent that some maintenance was performed. Several large and small limbs and branches were removed in a possible attempt to take weight off the core trunk area and the wound was coated with an unknown substance to attempt staving off disease.*
>
> *The leaf canopy is nearly gone with only some stunted leaves remaining. Valley Oaks are deciduous but this tree is significantly different in leaf drop than several other Valley Oaks I compared it with on the site (see photo attached). The base of the tree is missing root crown flare. The proximity to the road indicates the possibility that fill occurred when the gravel road was installed.*
>
> *This tree is in poor health. It is likely that when the co-dominant trunk broke from the tree that the tree began to decline in health. I do not know if the road construction came before or after the trunk failure but in any case, the tree will not retain vigor with outside help and it would be favorable to remove the tree for safety.*

The information I provided remains my professional opinion as to the reason the oak tree died. It is true that grading operations can greatly affect the health of oak trees but in this case the tree most likely died of natural causes. When the co-dominant leader tore from the trunk during a said storm event, it created a wound that was a minimum 40% of the trunk wall diameter. This condition is noted as a 'high risk' in professional documents and textbooks. A large wound such as this would be difficult for a *Quercus Lobata* to compartmentalize. If you need reference to this literature I am happy to provide that to you.

The oak tree is 40 feet from the road. This is adequate distance for health and survival of the tree. Photo documentation showing grading negligence would be necessary information to determine if that had some impact in the tree's decline.

Sincerely,

Chris Kukula, ISA
Certified Arborist WE-2238

APPENDIX K

CHAPTER 5-2 / NOISE

Chapter 5-2

NOISE

Sections:

5-201	**Declaration of policy.**
5-202	**Definitions.**
5-203	**Noise control officer (NCO).**
5-204	**General noise regulation.**
5-205	**Maximum permissible noise levels by receiving land use.**
5-206	**Noise measurement procedure.**
5-207	**Prohibited acts.**
5-208	**Special provisions.**
5-209	**Exception permits.**

5-201 Declaration of policy.

It is declared to be the policy of the city that the peace, health, safety and welfare of the citizens of Lafayette require protection from excessive, unnecessary, annoying and unreasonable noises from any and all controllable noise sources in the community. It is the intention of the city council to control the adverse effect of such noise sources on the citizen under any normal condition of use, especially those conditions of use which have the most severe impact upon any person. (Ord. 177 § 1 (part), 1977)

5-202 Definitions.

For the purposes of this chapter, certain terms are defined as follows:

(a) "Ambient noise level" means the composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing average level of environmental noise at a given location, technically the level exceeded fifty percent of the time or L_{50}.

(b) "A-weighted sound level" means the sound level, expressed in decibels, as measured with a sound level meter using the A-weighted network to approximate the frequency characterisics of human hearing, as specified in American National Standards Institute specifications for sound level meters (ANSI S1.4-1971, or the latest approved version thereof). The level so measured is designated "dBA."

(c) "Commercial purpose" means the use, operation or maintenance of any sound-amplifying equipment for the purpose of advertising any business, or any goods, or any services, or for the purpose of attracting the attention of the public to, or advertising for, or soliciting patronage of customers to or for any performance, show, entertainment, exhibition or event, or for the purpose of demonstrating such sound equipment.

(d) "Construction" means any site preparation, assembly, erection, substantial repair, alteration or similar action, but excluding demolition, for or of public or private rights-of-way, structures, utilities or similar property.

(e) "Decibel" means a unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base ten of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals.

(f) "Emergency" means any occurrence or set of circumstances involving actual or imminent physical trauma or property damage, which demands immediate action.

(g) "Emergency work" means any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.

(h) "Fixed noise source" means a stationary device which produces sounds while fixed or motionless, including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigeration equipment.

(i) "Impulsive sound" means sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions, hammer impacts and the discharge of firearms.

(j) "Local background noise level" means the minimum A-weighted sound level repeated during a six-minute period as measured on a sound level meter using "slow" meter response. The local background noise level shall be determined with the noise source at issue silent, and in the same location as the measurement of the noise level of the source or sources at issue.

(k) "Mobile noise source" means any noise source other than a fixed noise source.

(l) Motor vehicle" means any self-propelled vehicle as defined in the California Motor Vehicle Code, including all on-highway type motor vehicles subject to registration under said code, and all off-highway type motor vehicles subject to identification under said code.

(m) "Noise" means any sound which annoys or disturbs human beings or which causes or tends to cause an adverse psychological or physiological effect on human beings.

(n) "Noise control officer (NCO)" means the city manager or any other city employee or contractor designated by the city manager.

(o) "Noise level" means the maximum continuous sound level or repetitive peak level produced by a source or group of sources, as measured with a type 2 general purpose sound level meter using the A-weighted scale and with the meter response function set to "slow."

(p) "Noise zone" means any defined areas or regions of a generally consistent land use wherein the ambient noise levels are within a range of five dB.

(q) "Pure tone" means any sound which can be distinctly heard as a single pitch or a set of single pitches.

(r) "Real property boundary" means a line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but not including intra-building real property divisions.

(s) "Sound-amplifying equipment" means any device for the amplification of the human voice, music or any other sound, excluding (1) standard automobile radios when used and heard only by the occupants of the vehicle in which the radio is installed, and (2) warning devices on authorized emergency vehicles or horns or other warning devices on any vehicle, used only for traffic safety purposes.

(t) "Sound" means an oscillation in pressure, particle displacement, particle velocity or other physical parameter in a medium with internal forces that cause compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

(u) "Sound level meter" means an instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels, complying with the requirements for type 2 or at least type S2A general purpose meters as delineated in American National Standards Institute specifications for sound level meters, S1-4.1971, or the most recent revision thereof.

(v) "Weekdays" means every day, except Sundays and holidays.

(Ord. 177 § 1 (part), 1977)

5-203 Noise control officer (NCO).

(a) In order to implement and enforce this chapter and for the general purpose of noise abatement and control, the noise control officer shall have the authority to:

(1) Investigate and pursue possible violations of this chapter;

(2) Review public and private projects. On all public and private projects which are likely to cause noise in violation of this chapter and which are subject to mandatory review or approval by any city officer, employee or commission:

(A) Review for compliance with the intent and provisions of this chapter,

(B) Require sound analyses which identify existing and projected noise sources and associated noise levels,

(C) Require usage of adequate measures to avoid violation of any provision of this chapter;

(3) Perform inspections. After requesting permission to do so, and upon presentation of identification as the noise control officer, enter and/or inspect any private property, place, report or records at any time when granted permission by the owner, or by some other person with apparent authority to act for the owner. When permission is refused or cannot be obtained, a search warrant may be requested from a court of competent jurisdiction upon showing of probable cause to believe that a violation of this chapter may exist. Such inspection may include administration of any necessary tests;

(4) Develop measurement and enforcement procedures. In order effectively to implement and enforce this chapter, the noise control officer shall, within a reasonable time after the effective date of the ordinance codified in this chapter:

(A) Develop measurement standards and procedures which will further the purposes of this chapter,

(B) Develop administrative procedures which will provide for effective enforcement of this chapter.

(b) In the enforcement of this chapter, it shall be the policy of the noise control officer to stress voluntary compliance with the provisions hereof, and to seek resolution of problems

through cooperation and mutual agreement between those involved.
(Ord. 177 § 1 (part), 1977)

5-204 General noise regulation.

(a) Notwithstanding any other provision of this chapter, and in addition thereto, it shall be unlawful for any person wilfully to make or continue, or cause to be made or continued, any loud, unnecessary or unusual noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to persons residing in the area.

(b) The standards which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:

(1) The sound level of the objectionable noise;
(2) The ambient noise level;
(3) Whether the nature of the noise is usual or unusual;
(4) The proximity of the noise to residential sleeping facilities;
(5) The nature and zoning of the area from which the noise emanates;
(6) The density of the inhabitation of the area from which the noise emanates;
(7) The time of day or night the noise occurs;
(8) The duration of the noise and its tonal, informational or musical content;
(9) Whether the noise is continuous, recurrent or intermittent;
(10) Whether the noise is produced by a commercial or noncommercial activity.

(Ord. 177 § 1 (part), 1977)

5-205 Maximum permissible noise levels by receiving land use.

(a) The noise standards for the various categories of land use identified by the noise control officer as presented in Table 5-205 shall, unless otherwise specifically indicated, apply to all such property within a designated zone.

(b) No person shall produce, suffer or allow to be produced by any machine, animal or device, or any combination of same on any property owned, leased, occupied or otherwise controlled by such person, any noise which causes the noise level when measured on any other property to exceed:

(1) The noise standard for that land use as specified in Table 5-205 for a cumulative period of more than 30 minutes in any hour;
(2) The noise standard plus five dB for a cumulative period of more than 15 minutes in any hour;
(3) The noise standard plus ten dB for a cumulative period of more than five minutes in any hour;
(4) The noise standard plus 15 dB for a cumulative period of more than one minute in any hour; or
(5) The noise standard plus 20 dB for any period of time.

(c) If the measured local background noise level exceeds that permissible for the applicable time period within any of the first four noise limit categories described in subsection (b),

the allowable noise exposure standard shall be increased in five-dB increments in each category as appropriate to encompass or reflect said ambient noise level.

Table 5-205
Outdoor Noise Limits

Receiving Land Use Category	Time Period	Noise Level Limit Standard — dBA
Single-family residential	10 p.m. — 7 a.m.	45
	7 a.m. — 10 p.m.	50
Multifamily residential	10 p.m. — 7 a.m.	50
schools, libraries, public spaces	7 a.m. — 10 p.m.	55
Commercial	10 p.m. — 7 a.m.	55
	7 a.m. — 10 p.m.	60

(d) In the event the alleged offensive noise contains a steady, audible tone such as a whine, screech or hum, or is an impulsive noise such as hammering, or contains music or speech conveying informational content, the standard limits set forth in Table 5-205 shall be reduced by five dB.

(Ord. 177 § 1 (part), 1977)

5-206 Noise measurement procedure.

(a) Upon receipt of a complaint from a citizen, the noise control officer or his agent, equipped with sound-level measurement equipment satisfying the requirements specified in Section 5-202, shall investigate the complaint. If, in the opinion of the noise control officer, based upon the readily available and observable information and upon the detailed allegations of the complainant, there is probable cause to suspect a violation of this chapter, the noise control officer shall make and record sound level measurements and shall record all information pertinent to the complaint, including the following:

(1) Type of noise source;
(2) Location of noise source relative to complainant's property;
(3) Time period during which noise source is considered by complainant to be intrusive;
(4) Total duration of noise produced by noise source;
(5) Date and time of noise measurement survey;
(6) Height and location of the sound level meter microphone.

(b) Utilizing the "A" weighting scale of the sound level meter and the "slow" meter response ("fast" response for impulsive type sounds), the noise control officer or his agent shall measure the noise level at a position or positions along the complainant's property line

closest to the noise source or at the location along the boundary line where the noise level is at maximum. In general, the microphone shall be located five feet above the ground and six feet or more from the nearest reflective surface, where possible. However, in those cases where another elevation is deemed appropriate, the latter shall be utilized. Using an acoustic calibrator, calibration of the meter used shall be performed immediately prior to the measurements.

(Ord. 177 § 1 (part), 1977)

5-207 Prohibited acts.

Except as may otherwise be provided in this chapter, it shall be unlawful for any person to do, or cause to be done, any of the following prohibited acts:

(a) Radios, Television Sets, Musical Instruments and Similar Devices. Operating, playing or permitting the operation or playing of any radio, television set, phonograph, drum, musical instrument or similar device which produces or reproduces sound:

(1) Between the hours of ten p.m. and seven a.m. in such a manner as to create a noise disturbance across a residential or commercial real peroperty line or at any time to violate the provisions of Section 5-205, or

(2) In such a manner as to exceed the levels set forth for public space in Table 5-205, measured at a distance of at least 50 feet (15 meters) from such device operating on a public right-of-way or public space;

(b) Loudspeakers (Amplified Sound). Using or operating for any purpose any loudspeaker, loudspeaker system or similar device between the hours of ten p.m. and seven a.m., such that the sound therefrom creates a noise disturbance across a residential real property line, or at any time violates the provisions of Section 5-205;

(c) Animals and Birds. Owning, possessing or harboring any animal or bird which frequently or for long duration howls, barks, meows, squawks or makes other sounds which create a noise disturbance across a residential or commercial real property line;

(d) Loading and Unloading. Except for the regular collection of garbage and other refuse by a person franchised to engage in that activity, loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of ten p.m. and seven a.m. in such a manner as to cause a noise disturbance across a residential real property line or at any time to violate the provisions of Section 5-205;

(e) Construction. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of ten p.m. and seven a.m. on weekdays, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line or at any time violates the provisions of Section 5-205, except for emergency work of public service utilities. This subsection shall not apply to the use of domestic power tools for maintenance purposes;

(f) Domestic Power Tools and Equipment.

(1) Operating or permitting the operation of any portable, mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool for maintenance purposes between ten p.m. and seven a.m. so as to create a noise disturbance across a residential or commercial real property line,

(2) Any stationary installed motor, machinery, pump, etc. shall be sufficiently enclosed or muffled and maintained as not to create a noise disturbance or at any time violate the provisions of Section 5-205;

(g) Warning Signals. Operating or permitting the operation of any vehicle horns or other devices intended primarily to create a loud noise for warning purposes, when the vehicle is at rest, or when a situation endangering life, health or property is not imminent;

(h) Air-conditioning and Air-handling Equipment. Operating or permitting the operation of any air-conditioning or air-handling equipment in such a manner as to exceed the applicable sound levels contained in Table 5-207;

(i) Swimming Pool Equipment. Operating or permitting the operation of any residential swimming pool equipment between the hours of eight p.m. and eight a.m., except when below-freezing temperatures are predicted for the city, or on days of electric power shortages; or at other times in such a manner as to exceed the applicable sound levels contained in Table 5-207.

Table 5-207
Maximum Allowable Sound Levels
for Air-Conditioning, Air-Handling and Swimming Pool Equipment

Measurement Location	Units Installed Before 1-1-78	Units Installed On or After 1-1-78
Any point on neighboring residential property line, 5 feet above grade level, no closer than 3 feet from any wall	50	45
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet from any wall	45	40
Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface	45	40

At 50 feet from equipment if the above locations are at greater distance:		
Commercial zone	60	55
Residential zone	50	55

(Ord. 177 § 1 (part), 1977)

5-208 Special provisions.

(a) Daytime Exceptions. Any mobile noise source which does not produce a noise level exceeding 70 dBA at a distance of 25 feet under its most noisy condition of use shall be exempt from the provisions of Section 5-205 and 5-207 between the hours of eight a.m. and eight p.m. on weekdays, and between the hours of ten a.m. and six p.m. on Sundays and holidays.

(b) Safety Devices. Aural warning devices which are required by law to protect the health, safety and welfare of the community shall not produce a noise level more than three dB above the standard or minimum level stipulated by law.

(c) Emergencies. Emergencies and emergency work are exempt from the provisions of this chapter.

(d) Construction and Maintenance. Notwithstanding any other provision of this chapter, between the hours of eight a.m. and eight p.m. on weekdays and between the hours of ten a.m. and six p.m. on Sundays and holidays, construction, alteration and repair activities which are authorized by a valid city permit; and maintenance activities such as lawn mowing, rotovating, tree trimming and painting, which require no city permit (but not including the operation of stationary, installed equipment, such as swimming pool and air-conditioning motors and devices), shall be allowed if they meet at least one of the following noise limitations:

(1) No individual piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 50 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible.

(2) The noise level at the nearest affected property shall not exceed 80 dBA.

(e) Sound Performances and Special Events. Sound performances and special events not exceeding 80 dBA measured at a distance of 50 feet are exempt from the provisions of this chapter when approval therefor has been obtained from the appropriate governmental entity.

(f) Agricultural Operations. All mechanical devices, apparatus or equipment associated with agricultural operations conducted on agricultural property are exempt from the provisions of this chapter unless in the vicinity of residential land uses, in which case the following conditions shall apply:

(1) Operations may take place only between six a.m. and eight p.m.;

(2) Such operations and equipment are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions;

(3) Such operations and equipment are associated with agricultural pest control through pesticide application, provided the application is made in accordance with applicable law and regulations; or

(4) Such devices utilized for pest control which incorporate stationary or mobile noise sources are operated only by permit issued by the noise control officer. The allowable hours and days for operation of these devices will be specified in the permit.

(g) Outdoor Activities. The provisions of this chapter shall not apply to occasional outdoor gatherings, public dances, shows and sporting and entertainment events, provided such events are conducted pursuant to a permit or license issued by the city.

(Ord. 177 § 1 (part), 1977)

5-209 Exception permits.

If any person can prove to the noise control officer that a diligent investigation of available noise abatement techniques indicates that immediate compliance with the requirements of this chapter would be impractical or unreasonable, a permit to allow an exception from the provisions contained in all or a portion of this chapter may be issued, after appropriate notice and hearing, by the noise control officer, with suitable conditions to minimize the public detriment caused by such exception. Any such permit shall be of as short duration as reasonable, not exceeding six months, but renewable for additional six-month periods upon a showing of good cause; and shall be conditioned by a schedule for compliance and by details of methods therefor in appropriate cases. Any person aggrieved by the decision of the noise control officer may appeal to the city council pursuant to the appeal procedures provided in Sections 4-118 and 4-119 of this code. (Ord. 177 § 1 (part), 1977)

APPENDIX L

TECHNICAL MEMORANDUM - CDM

100 Pringle Avenue, Suite 300
Walnut Creek, California 94596
tel: 925 933-2900
fax: 925 933-4174

Technical Memorandum

Existing and Proposed Storm Drainage Conditions at MS 504-87

We have made a preliminary design of storm drainage improvements for MS 504-87, and have calculated the 10-year flows for both existing and proposed conditions.

Existing Conditions

The existing conditions are shown on Figure 1. Runoff from Parcel C, and the off-site properties, flows downhill from west to east and leaves MS 504-87 at Points A and B. The 10-year flow at Point A is 10.5 cubic feet per second (cfs), and the 10-year flow at Point B is 6.1 cfs. The 10-year flow at Point B from upstream lands is 32 cfs.

Proposed Conditions

The proposed conditions are shown on Figure 2. In preparing this design, three conditions have been considered: (1) pollutant removal from runoff, (2) low flow control of runoff, and (3) reduction of the 10-year peak flow so it will not exceed existing conditions.

Runoff from impervious surfaces, and will be collected and conveyed to the vegetated swale. Subsurface flows from the landslide repair areas also will be conveyed to the swale. Pollutants will be removed and waters leaving the swale will flow into the Creek.

During heavy storms the low flows will be conveyed to the vegetated swale, and the high flows will be conveyed to the detention basin where they will be detained, and then released at a low rate to the Creek.

At Point A the 10-year flow will be 1.8 cfs. At Point B the 10-year flow will be 6.0 cfs. At both points the 10-year flows will be less than the existing condition flows.

The 10-year flow at Point B from upstream lands will remain at 32 cfs.

Conclusion

Storm drainage improvements in Parcel C will result in both low flows and high flows that leave MS 504-87 that will be less than the existing condition flows that enter Happy Valley Creek.

This conclusion does not support the allegation by opponents that MS 504-87 will result in more stormwater runoff and subsurface waters into Happy Valley Creek, and erosion would increase and would cause the Creek banks to become unstable.

The vegetated swale and detention basin concept was discussed with Tony Coe at the City Offices on July 10. He said the concept would be acceptable.

August 4, 2008

APPENDIX L

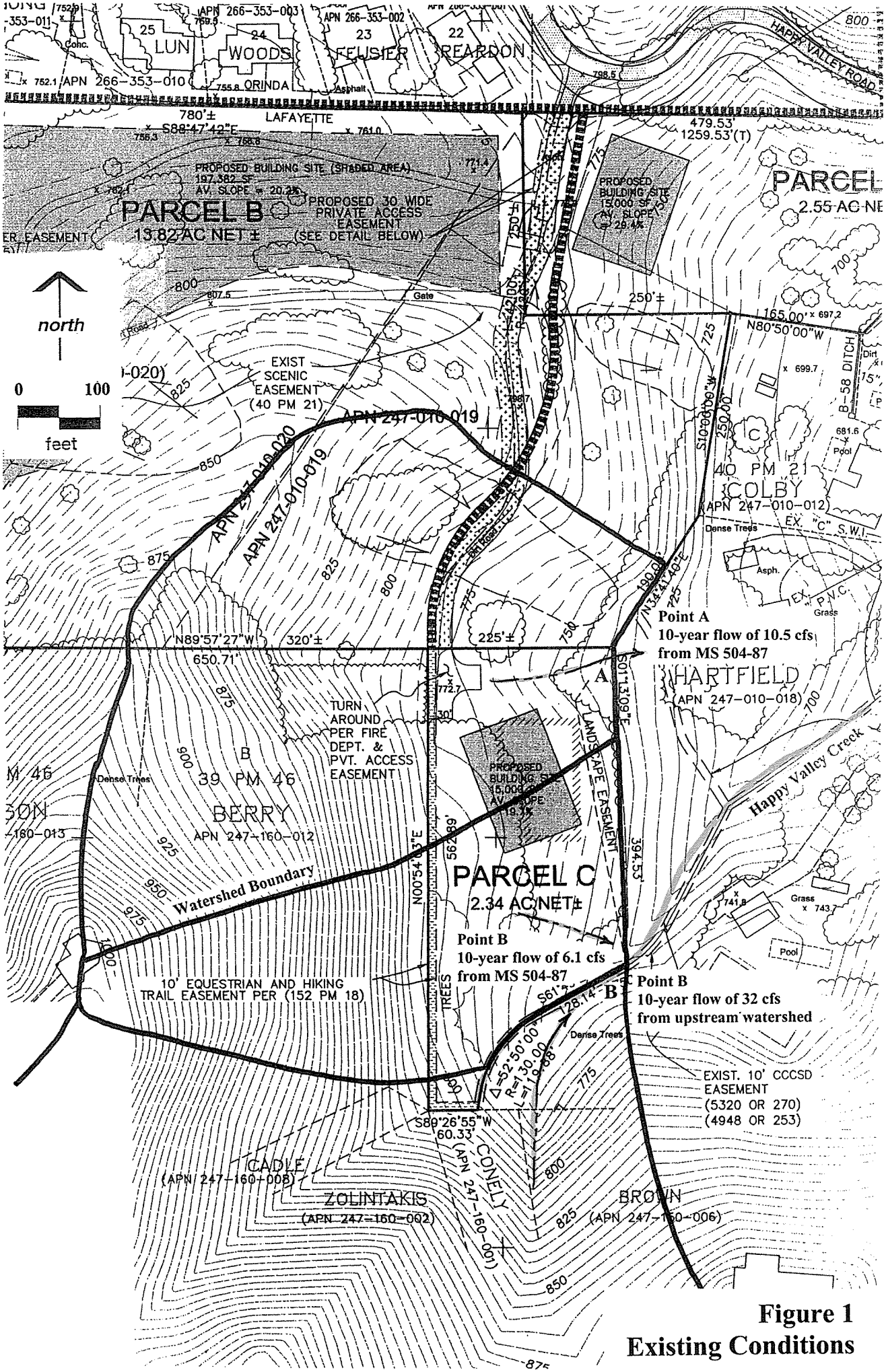


Figure 1
Existing Conditions

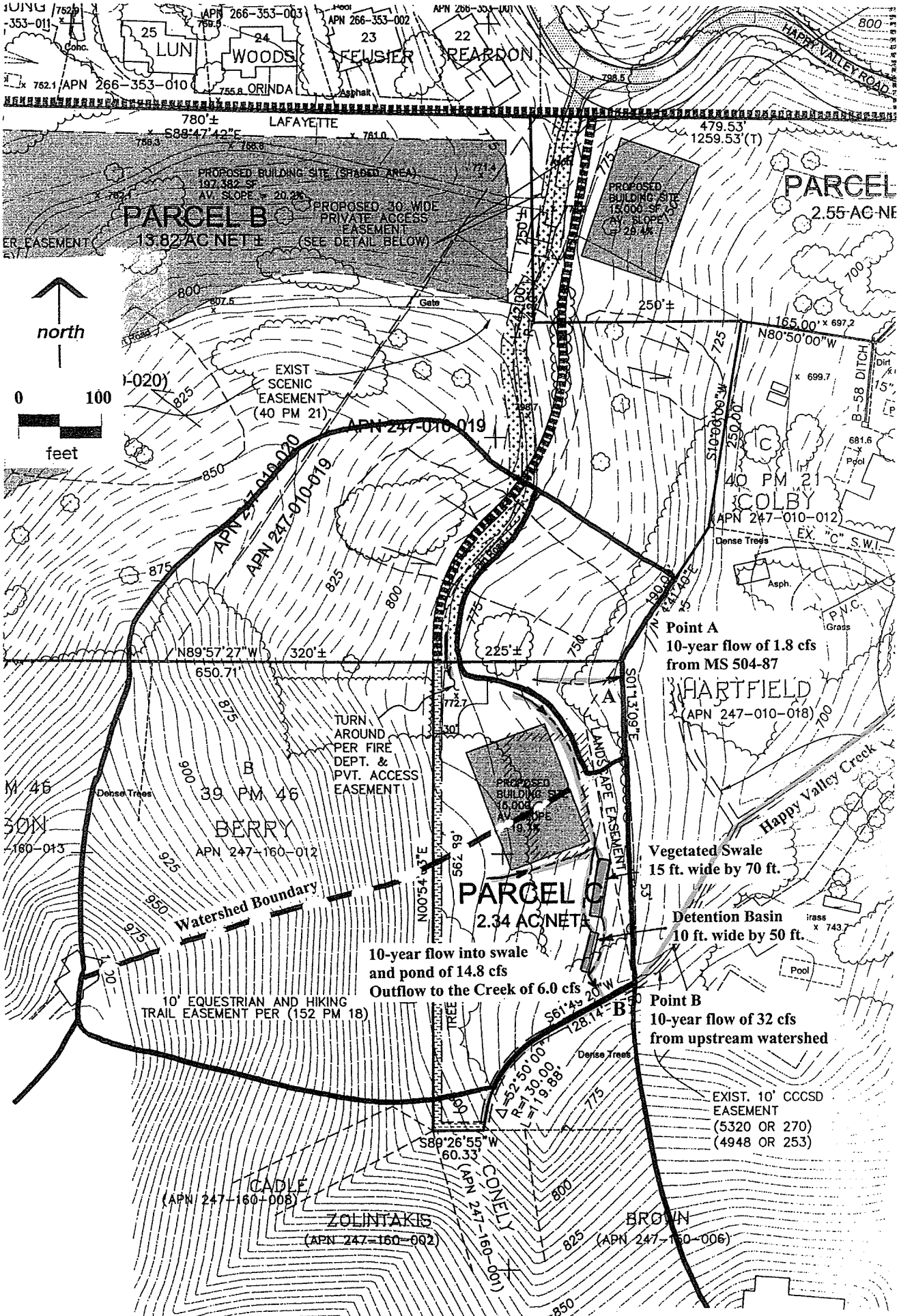


Figure 2
Proposed Conditions